

# Return your Warranty Registration card today to ensure you receive all the benefits you're entitled to.

Once your PHILIPS purchase is registered, you're eligible to receive all the privileges of owning a PHILIPS product. So complete and return the Warranty Registration Card enclosed with your purchase at once, and take advantage of these important benefits.

## Warranty Verification

Registering your product within 10 days confirms your right to maximum protection under the terms and conditions of your PHILIPS warranty.

## Owner Confirmation

Your completed Warranty Registration Card serves as verification of ownership in the event of product theft or loss.

## Model Registration

Returning your Warranty Registration Card right away guarantees you'll receive all the information and special offers which you qualify for as the owner of your model.

# PHILIPS

**Congratulations on your purchase, and welcome to the "family!"**

### Dear PHILIPS product owner:

Thank you for your confidence in PHILIPS. You've selected one of the best-built, best-backed products available today. And we'll do everything in our power to keep you happy with your purchase for many years to come.

As a member of the PHILIPS "family," you're entitled to protection by one of the most comprehensive warranties and outstanding service networks in the industry.

What's more, your purchase guarantees you'll receive all the information and special offers for which you qualify, plus easy access to accessories from our convenient home shopping network.

And most importantly you can count on our uncompromising commitment to your total satisfaction.

All of this is our way of saying welcome-and thanks for investing in a PHILIPS product.

Sincerely,




Lawrence J. Blanford  
President and Chief Executive Officer


**P.S. Remember, to get the most from your PHILIPS product, you must return your Warranty Registration Card within 10 days. So please mail it to us right now!**



Know these  
**safety** symbols



 This "bolt of lightning" indicates uninsulated material within your unit may cause an electrical shock. For the safety of everyone in your household, please do not remove product covering.

 The "exclamation point" calls attention to features for which you should read the enclosed literature closely to prevent operating and maintenance problems.

**WARNING:** TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

**CAUTION:** To prevent electric shock, match wide blade of plug to wide slot, fully insert.

**ATTENTION:** Pour éviter les choc électriques, introduire la lame la plus large de la fiche dans la borne correspondante de la prise et pousser jusqu'au fond.

### For Customer Use

Enter below the Serial No., which is located on the rear of the cabinet. Retain this information for future reference.

Model No. \_\_\_\_\_  
Serial No. \_\_\_\_\_




# PHILIPS

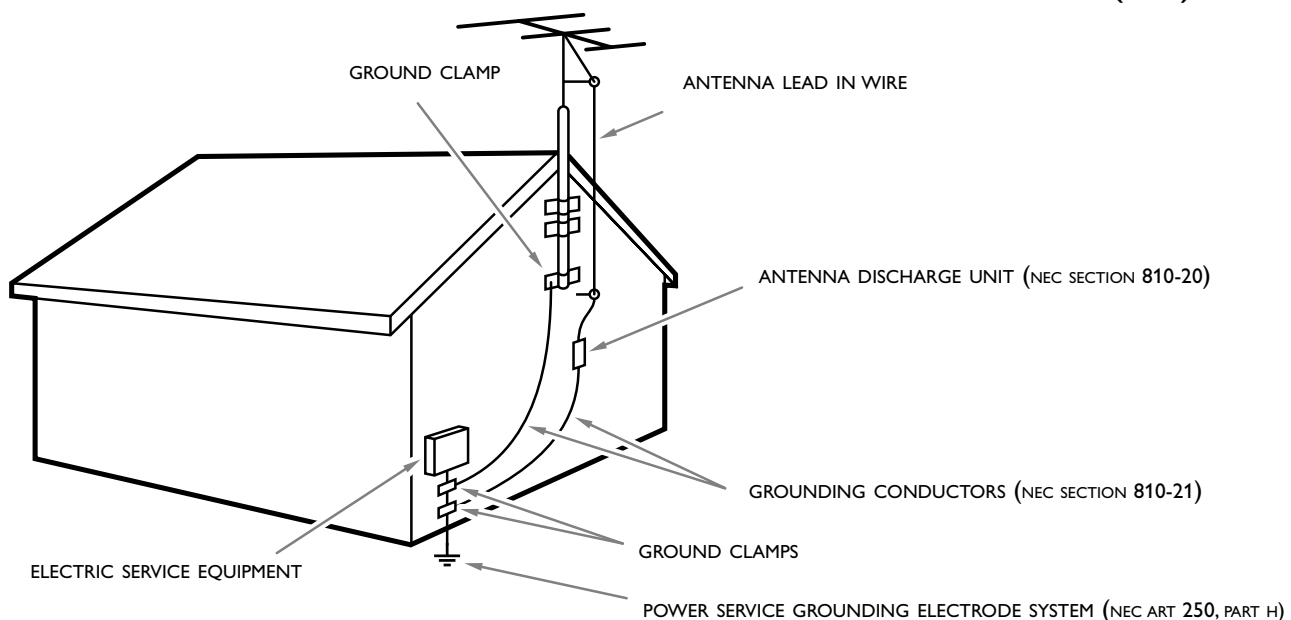
Visit our World Wide Web Site at <http://www.philips.com>

# IMPORTANT SAFETY INSTRUCTIONS

## Read before operating equipment

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and third grounding prong. The wide blade or third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12.  Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. This product may contain lead or mercury. Disposal of these materials may be regulated due to environmental considerations. For disposal or recycling information, please contact your local authorities or the Electronic Industries Alliance: [www.eiae.org](http://www.eiae.org).
16. **Damage Requiring Service** - The appliance should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
17. **Tilt/Stability** - All televisions must comply with recommended international global safety standards for tilt and stability properties of its cabinets design.
  - Do not compromise these design standards by applying excessive pull force to the front, or top, of the cabinet which could ultimately overturn the product.
  - Also, do not endanger yourself, or children, by placing electronic equipment/toys on the top of the cabinet. Such items could unsuspectingly fall from the top of the set and cause product damage and/or personal injury.
18. **Wall or Ceiling Mounting** - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
19. **Power Lines** - An outdoor antenna should be located away from power lines.
20. **Outdoor Antenna Grounding** - If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electric Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the masts and supporting structure grounding of the lead-in wire to an antenna-discharge unit, size of grounding connectors, location of antenna-discharge unit, connection to grounding electrodes and requirements for the grounding electrode. See Figure below.
21. **Objects and Liquid Entry** - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

### EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE (NEC)



**Note to the CATV system installer :** This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

# Contents

## Installation

Preparation .....	4
Installation	
To use the menus .....	5
Select the menu language .....	5
Select Tuner Mode .....	5
Store TV channels .....	6
Editing of channels .....	6
Naming of channels .....	6

## Operation

Use of the remote control .....	7-8
Use of the menus	
Picture menu .....	9
Sound menu .....	10-11
Features menu	
Timer .....	11-12
AutoLock .....	13
Movie Ratings Lock .....	14
TV Ratings Lock .....	15
Block Options .....	16
Closed Captions .....	17
Screen format .....	18
Rotation .....	19
Blue mute .....	19
Active Control .....	19
PIP / Dual Window .....	20

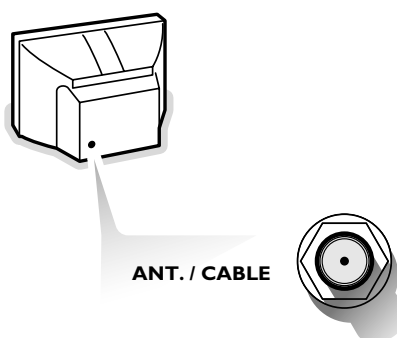
## Connect accessory devices

Connecting and selecting accessory devices .....	21-25
Setting the remote control to work accessory devices .....	26-28
Selecting connected devices .....	29
Recording .....	30
<b>Before Calling Service .....</b>	<b>31</b>
<b>Tips .....</b>	<b>32</b>
<b>Index .....</b>	<b>32</b>
<b>Glossary .....</b>	<b>33</b>
<b>Factory Service Center Location .....</b>	<b>34-35</b>
<b>Limited warranty .....</b>	<b>36</b>

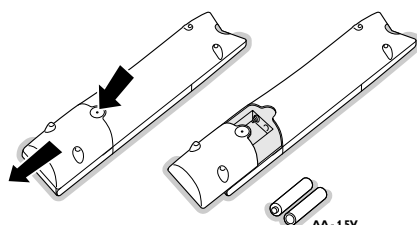
## Preparation

**Do not insert the power plug in a wall socket before all connections are made.**

- 1 **Place the TV on a solid surface.**  
For ventilation, leave at least 2" free all around the TV.  
Do not place the TV on a carpet.  
To prevent any unsafe situations, do not place any objects on top of the TV.  
Avoid heat, direct sunlight and exposure to rain or water.
- 2 Connect a cable TV signal, to the **ANT./CABLE** jack at the back of the TV.  
For best picture quality use the suppressor-aerial cable supplied.

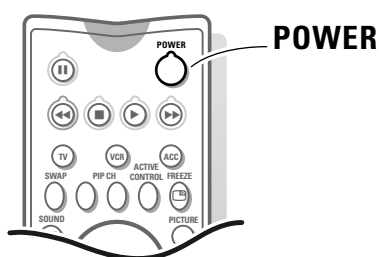


- 3 **Insert the power plug** in the wall socket. Refer to the rear of the TV set for the correct operation voltage. Consult your local dealer if your AC power supply is different. To prevent damaging the power (AC) cord which could cause a fire or electric shock, do not place the TV on the cord.



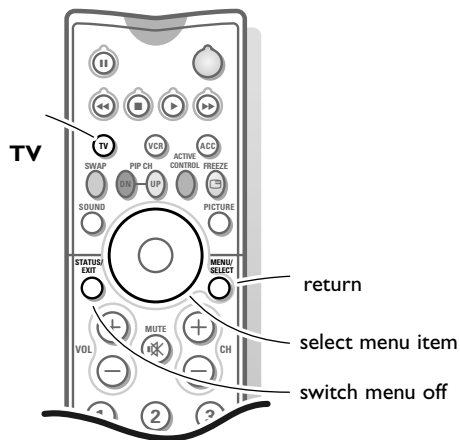
- 4 **Remote Control**  
Remove the cover of the battery compartment.  
Insert the 2 batteries supplied (Type AA-1,5V).

*The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas exhausted batteries may not be disposed of with your household waste. Please check on how to dispose of exhausted batteries according to local regulations.*



- 5 **Turn the TV on**  
Press the **POWER** switch at the front of your TV or press the red **POWER** button on the remote control.  
A red LED on the front of the TV lights up and the screen comes on.

# Installation



PICTURE  
SOUND  
FEATURES  
**INSTALL**

```
INSTALL
  LANGUAGE
  TUNER MODE
  AUTO PROGRAM
  CHANNEL EDIT
  NAME
```

```
INSTALL
  LANGUAGE
  TUNER MODE
  AUTO PROGRAM
  CHANNEL EDIT
  NAME
```

## To use the menus

Note: Press the **TV** button to be sure your remote control is in the TV mode.

- 1 Press the **MENU/SELECT** button to display the main menu.
- 2 Use the cursor in the up/down directions to select a menu item.  
*Note: Sometimes not all the menu items are visible on the screen; press the cursor down until all the items are displayed.*
- 3 Use the cursor in the left/right directions to access the sub-menu and to adjust the settings.
- 4 Press the **MENU/SELECT** button to return.
- 5 Press the **STATUS/EXIT** button to switch the menu off.

*Note: If no action is executed, the menu automatically disappears after about 15 seconds.*

### Select the menu language

First, select your language.

- 1 Press the **MENU/SELECT** button.
- 2 Select **INSTALL** with the cursor down.
- 3 Press the cursor right to select **INSTALL**.
- 4 Press the cursor right to select **LANGUAGE**.
- 5 Select your language with the cursor up/down.
- 6 Press the **MENU/SELECT** button to return to the **INSTALL** menu.

From now onwards, all on screen displays will appear in the language that you have chosen.

*Remark: It does not change the other on screen text features, such as Closed Captioning (CC), with TV shows.*

- 7** Proceed with the **INSTALL** menu.

## Select Tuner Mode

With the tuner mode control set to **AUTO**, Auto program (see next page) will detect whether or not cable input is present.

Select **CABLE** or **ANTENNA** if you want to make the option yourself.  
When **CABLE** is selected, channels 1-125 are available.  
When **ANTENNA** is selected, channels 2-69 are available.

INSTALL  
LANGUAGE  
TUNER MODE  
AUTO PROGRAM  
CHANNEL EDIT  
NAME

CABLE  
PLEASE WAIT



INSTALL  
LANGUAGE  
TUNER MODE  
AUTO PROGRAM  
CHANNEL EDIT →→  
NAME

3  
4  
5  
6  
7 SKIPPED

INSTALL  
LANGUAGE  
TUNER MODE  
AUTO PROGRAM  
CHANNEL EDIT  
NAME

CNN

## Store TV channels

Your TV can automatically set itself for local area (or cable TV) channels.

- 1 Select **AUTO PROGRAM** in the **INSTALL** menu.
- 2 Press the cursor right to start the searching.  
All TV channels are searched for and stored automatically.  
The progress of autoprogramming is displayed.

*Note: All channels must be unlocked in order to autoprogram. If requested, enter your PIN code to unlock all channels. (See AutoLock™ in the Features menu, p. 14).*

- 3 When the tuning is completed, proceed with the **INSTALL** menu or press the **STATUS/EXIT** button to switch the menu off.

*Note: If you want to delete any unwanted channels from the stored TV channels, see Editing of channels below.*

## Editing of channels

This feature allows you to edit or skip channels from the channel list which have bad or weak signals or channels which you do not watch often.

*Note: Once a channel is skipped, you cannot select it with the **CH -** or **+** button.*

*You can only access the channel with the digit keys.*

- 1 Select **CHANNEL EDIT** in the **INSTALL** menu.
- 2 Press the cursor right to enter the channel list.
- 3 Select the channel you want to skip with the cursor up/down.
- 4 Press the cursor right to skip the selected channel.  
The message **SKIPPED** is displayed.
- 5 Press the cursor up/down to select another channel and repeat step 4.
- 6 Press the cursor left or the **MENU/SELECT** button to return to the **INSTALL** menu or the **STATUS/EXIT** button to switch menu off.

*Note: to add back channels to the list, repeat steps 1 to 4 and press the **STATUS/EXIT** button to switch menu off.*

## Naming of channels

The channel name feature allows you to list the 'call' letters of your favorite channels beside their numbers when they appear on the screen.

The TV has in memory a list of the 50 most popular channel names (e.g. ABC, NBC, Fox, etc.).

You can also enter a custom name.

- 1 Select a TV channel or peripheral you want to assign a name or modify the existing name.
- 2 Select **NAME** in the **INSTALL** menu.
- 3 Press the cursor right to enter the menu.
- 4 Key in the selected character with the cursor up/down.
- 5 Move to the next character with the cursor right and key in the next character. You can key up to a maximum of 5 characters.
- 6 Press the **MENU/SELECT** button to store the named channel.
- 7 Press the **STATUS/EXIT** button to switch menu off.

# Operation

## Use of the remote control

### VCR control buttons

Press to rewind, stop, play, fast forward, or pause a videotape.

### TV VCR ACC

Mode buttons.

Press one of these buttons to use the remote control in the TV, VCR or in another accessory device mode.

Does the remote control turn the device on?

If yes, try other functions on the remote. If they also work with the device, then the remote is ready and no other steps are needed.

*When not in TV mode, certain buttons/functions do not work.*

If no, see Setting the remote control to work accessory devices, p. 26.

### PIP buttons: SWAP, PIP CH DN and UP, FREEZE

Press to operate Picture-in-Picture function. See p. 20.

### SOUND

Press to select an Auto Surround™ control. Choose from the factory set controls and a personal control that you set according to your own preferences through the on screen Sound menu.

The factory-set controls will tailor the TV sound so as to enhance the particular type of program you are watching.

### STATUS/EXIT

Press to see the current channel information (number) on the TV screen.

Also press to clear the TV screen after control adjustments.

### VOL +/-

Press to adjust the TV sound level.

### MUTE

Press to mute the sound.

To restore the sound to its previous level, press the button again.

### CH +/-

Press to select channels in ascending or descending order.

### POWER

Press to turn the TV on or off.

### ACTIVE CONTROL

Measures and corrects all incoming signals in order to provide the best picture quality settings.

Press to select the Active Control values On or Off.

**On:** Sharpness and Noise reduction are controlled automatically. The picture settings are being adapted continuously and automatically. The menu items cannot be selected.

### Freeze

Press to freeze the main picture.

*The Freeze functionality is not available when a device is selected connected to AV4.*

### PICTURE

Press to select an Auto Picture™ control. Choose from the factory set controls and a personal control that you set according to your own preferences through the on screen Picture menu.

The factory-set controls will tailor the TV picture so as to enhance the particular type of program you are watching, or improve the picture of a program that has a weak signal.

### MENU/SELECT

Press for the on screen menu to appear. Press to return to a higher menu level.

Also press this button to activate your choice or to confirm when in the menus.

### DIGIT BUTTONS

Press the digit buttons to select TV channels.

*Note: For a 2- or 3-digit number, the second and/or third digit must be entered.*

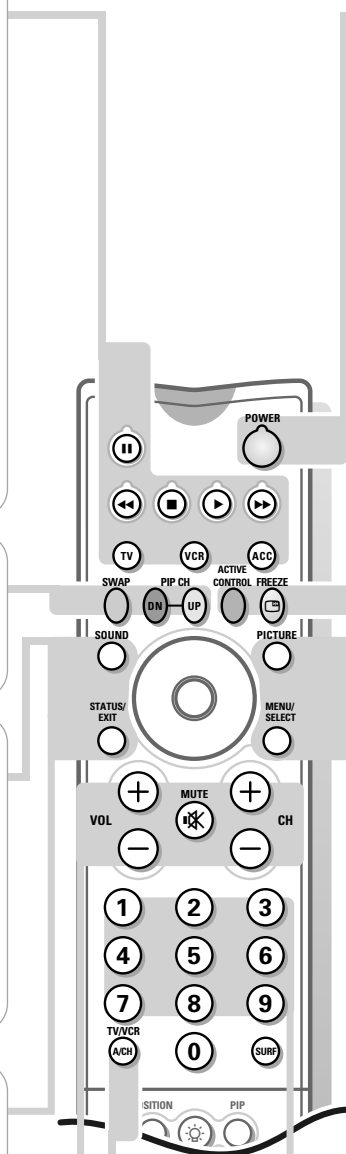
### TV/VCR - A/CH

#### TV/VCR

Press while in VCR mode to view the play back of a tape. Press again to return to TV mode.

#### A/CH

Press to alternate between the currently viewed channel and the previously viewed channel.



## AV

Press repeatedly to select the different signal sources connected to the TV:  
**AV1, CVI, AV2, AV3** (Front), **AV4 1080i** or **AV4 480p**.

To select connected equipment, see p. 29.

## Clock

Press to set the clock to switch to another channel at a specific time while you are watching another channel or when the set is in standby mode.

## DOLBY V

Press to select various factory Surround Sound listening modes.

**Dolby Virtual** (with Dolby Surround signals) Dolby Virtual (Virtual Dolby Surround) enables you to experience the effect of Dolby Pro Logic Surround, reproducing a rear sound effect.

## Incredible Surround

- In **Stereo** sound mode, when Incredible Surround is selected, it seems as though the loudspeakers are spread further apart from one another.
- In **Mono** sound mode, this feature, when turned on, enables you to hear a spatial sound effect.

## PROG. LIST

Press to display a list of channel numbers and their names. Each channel will appear as a selectable menu item. The current channel will be highlighted as default. Press the cursor up/down to scroll the list and highlight a channel. Press the cursor right to tune to the highlighted channels.

Channels marked **SKIPPED** in the Channel Edit control will not appear in the list. Each channel that is being blocked by AutoLock™ will appear with a padlock icon to indicate that the channel is not viewable.

## POSITION

Press to move the PIP picture to any of the four corners of the screen.

## Backlight button

Press to back-light the buttons on the remote control.

## PIP

Press to turn on PIP (Picture-in-Picture) On or Off. See p. 20.

## CURSOR KEY

**Up/Down:** allows you to select the next or previous menu item on the menu.

**Left/Right:** allows you to access the sub-menus, to adjust the settings and to select another picture format.

## SURF

Press to browse through a list of previously selected channels or sources.

You can place up to 10 favorite channels or sources in memory. Then, by pressing the **SURF** button you can quickly view the selected channels.

### To add a new channel or source:

- Press the channel number or source you want to add to the surf list.
- Press the **SURF** button.  
The request **ADD?** appears next to the selected channel or source.
- Press the cursor right to add.

*Note: Once a channel has been added, the request **DELETE?** appears, indicating you may delete the added channel, if you want.*

### To delete a channel or source:

- Press the **SURF** button.  
The request **DELETE?** appears
- Browse through the list to select the channel number or source you want to remove from the surf list.
- Press the cursor right to delete.

Press the **STATUS/EXIT** button to switch the menu off.

## REC

Press this button simultaneously with the ► button, when in VCR mode, for record.

## SAP

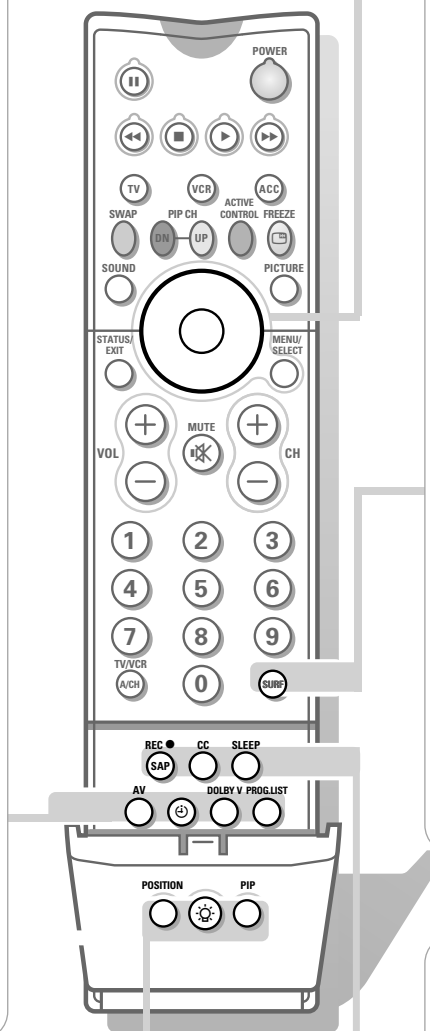
Press to select between Main and SAP (Second Audio Program) when you tune to a channel where SAP is available.

## CC

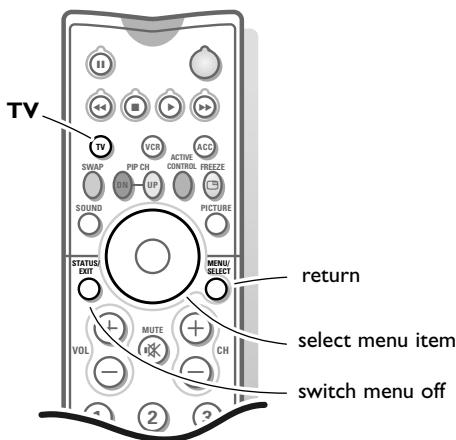
Press to switch Closed Caption on or off. For Closed Captioning options, see p. 18

## SLEEP

Press to set the TV to automatically turn itself off after a period of time. Choose 15, 30, 45, 60, 90, 120, 180 or 240 minutes before the TV will automatically turn off.







PICTURE  
SOUND  
FEATURES  
INSTALL

PICTURE  
BRIGHTNESS  
COLOR  
PICTURE  
SHARPNESS  
TINT  
COLOR TEMP  
DIGITAL OPTIONS  
DYN. CONTRAST

## Use of the menus

Note: Press the TV button to be sure your remote control is in the TV mode.

- 1 Press the **MENU/SELECT** button to display/cancel the main menu.
- 2 Use the cursor in the up/down directions to select the **PICTURE**, **SOUND** or **FEATURES** menu.
- 3 Press the cursor right to activate the selected menu.
- 4 Press the **MENU/SELECT** button repeatedly to return or press the **STATUS/EXIT** button to switch the menu off.

### Picture menu

Select the menu item with the cursor up/down and adjust the settings with the cursor left/right.

#### Brightness

This control allows you to adjust the brightness levels of the picture.

#### Color

This control allows you to adjust the color saturation of the picture.

#### Picture

This control allows you to adjust the contrast levels of the picture.

#### Sharpness *(not available for digital signals via AV4)*

This control allows you to adjust the edge definition of the picture to improve details.

#### Tint *(not available for digital signals via AV4 or CVI)*

This control allows you to adjust the color mix of the picture.

#### Color temperature

This control allows you to select the color temperature of the picture.

Select **Normal**, **Warm** or **Cool** with the cursor left/right.

#### Digital Options *(not available for digital signals via AV4)*

- **Progressive (Progressive scan)**  
Line doubling eliminates line flicker; motion compensation reduces jitter and offers smooth, yet sharp motion reproduction.
- **1050i lines:** provides for a further doubling of vertical resolution (of Progressive Scan) which adds astonishing sharpness.

#### Dynamic Contrast *(not available for digital signals via AV4)*

This feature automatically makes the contrast in the darker and the brighter picture areas more noticeable as the image on screen changes.

Normally, select **MED**. In certain circumstances it may be preferred to select **MIN** or **MAX**.

PICTURE  
SOUND  
FEATURES  
INSTALL

SOUND  
TREBLE  
BASS  
BALANCE  
AVL  
INCR. SURROUND  
HEADPHONE  
STEREO  
SAP  
AUDIO OUT  
SPEAKERS

HEADPHONE  
VOLUME  
BALANCE

## Sound menu

Select the menu item with the cursor up/down and adjust the settings with the cursor left/right.

### Treble

Treble attenuates or amplifies the high-frequency response of the audio output signal.

### Bass

Bass attenuates or amplifies the low-frequency response of the audio output signal.

### Balance

Adjusts the balance of the right and left speaker's sound output.

### AVL (Automatic Volume Leveller)

AVL **ON** automatically controls the volume level to avoid too large level differences, especially when switching to another channel or during commercial breaks.

### Incredible Surround

According to the received TV signal, Mono or Stereo or Dolby Surround, you can select various Surround Sound listening modes.

- In **Mono**: select **MONO** or **SPATIAL** with the cursor left/right. **SPATIAL** enables you to hear a spatial effect of sound.
- In **Stereo**: select **STEREO**, **INCREDIBLE SURROUND** or **DOLBY VIRTUAL**.  
**INCREDIBLE SURROUND**: it seems as though the TV's speakers are spread further apart from one another.  
**DOLBY VIRTUAL** (with Dolby Surround signals): enables you to experience the effect of Dolby Pro Logic Surround, reproducing a rear sound effect.

### Headphone

Allows you to adjust the volume and balance of the headphone.

- 1 Press the cursor right.
- 2 Select **VOLUME** or **BALANCE** with the cursor up/down.
- 3 Press the cursor left/right to adjust.
- 4 Press the **MENU/SELECT** button to return.

### Stereo

Select **MONO** or **STEREO** with the cursor left/right.

When **STEREO** has been selected, the television will reproduce any stereo broadcast signal it receives.

If Stereo is not present on a selected show and the TV is placed in **STEREO** mode, the sound coming from the set will remain monaural.

### SAP

An **SAP** is an additional part of the stereo broadcast system.

Send as a third audio channel, an **SAP** can be heard apart from the current TV program sound. TV channels are free to use **SAP** for any number of purposes. If an **SAP** signal is not present with a selected program, the **SAP** option cannot be selected.

Also, if **SAP** is selected on a channel (with **SAP**) and you select another channel, when you return to the original channel, **SAP** will be off. You will have to reselect the **SAP** feature.

## Audio Out

If you have connected the TV's **AUDIO OUTPUT** jacks to the **AUDIO INPUT** jacks on a stereo receiver, see **Additional Audio Connections**, p. 25, set **AUDIO OUT** to either **VARIABLE** or **FIXED** to determine whether you adjust the volume at the stereo receiver or at the TV.

Select **VARIABLE** to change the volume at the TV using the TV's remote control.

Select **FIXED** to change the volume at the stereo using the stereo's controls.

## Speakers

You might want to connect your own audio system to your TV and to hear TV programs through your audio hifi system. See **Additional Audio Connections**, p. 25.

Select **SPEAKERS ON** to route audio via the internal TV speakers.

Select **SPEAKERS OFF** to route audio via the external audio system speakers.

## Features menu

### Timer

Your TV comes with an on screen clock.

During normal operation press the **STATUS/EXIT** button to display the clock on the screen or turn on the timer display in the **TIMER** menu.

The timer feature also allows you to set the timer to switch to a selected channel at a specific time while you are watching another channel or when the TV is in standby mode.

*Note: The TV's clock settings may be lost when the TV is unplugged.*

- 1 Select **TIMER** in the **FEATURES** menu.
- 2 Press the cursor right to enter the timer.

### Setting the timer

- 1 Press the cursor right again to enter the **TIME** mode.
- 2 Press the cursor left/right to select the position you wish to enter.
- 3 Press the cursor up/down to select the digits for the time or use the digit buttons.  
If you entered an incorrect digit: complete the actual time with arbitrary numbers, then start again.
- 4 Press the **MENU/SELECT** button to return to the timer menu.

### Setting Start Time

- 1 Select **START TIME** with the cursor down.
- 2 Press the cursor right to enter the **START TIME** mode.
- 3 Press the cursor left/right to select the position you wish to enter.
- 4 Press the cursor up/down to select the digits for the time you want the program to be switched on or use the digit buttons.
- 5 Press the **MENU/SELECT** button to return to the timer menu.

PICTURE  
SOUND  
FEATURES  
INSTALL

FEATURES  
TIMER  
AUTOLOCK  
PIP  
CLOSED CAP  
FORMAT  
ROTATION  
BLUE MUTE  
ACTIVE CTRL

TIMER  
TIME  
START TIME  
STOP TIME  
CHANNEL  
ACTIVATE  
DISPLAY

### Setting Stop Time

- 1 Select **STOP TIME** with the cursor down.
- 2 Press the cursor right to enter the **STOP TIME** mode.
- 3 Repeat steps 3 to 5 from **Setting Start Time** to enter the time you want the program to be switched off.

### Select Channel

- 1 Select **CHANNEL** with the cursor down.
- 2 Select the channel you want to switch to.

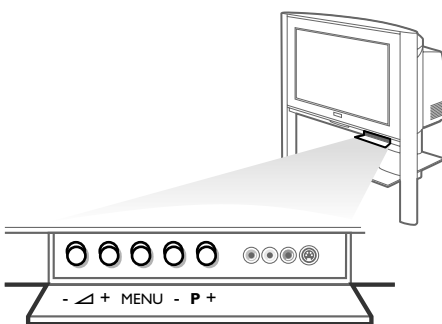
### Activating the timer

- 1 Select **ACTIVATE** with the cursor down.
- 2 Press the cursor right to enter the **ACTIVATE** mode to activate the timer.
- 3 Select with the cursor right, **OFF**, **ONCE** or **DAILY**, according to if you want to activate the timer on the selected channel and the selected time, every day or only once.


### Displaying the time


- 1 Select **DISPLAY** with the cursor down.
- 2 Press the cursor right to select **ON** or **OFF**, according to if you want to display the current time permanently on the TV screen or not.
- 3 Press the **MENU/SELECT** button to return or the **STATUS/EXIT** button to switch menu off.

## Keys in front of the TV



Should your remote control be lost or broken you can still change some of the basic picture and sound settings with the keys behind the door in front of the TV. Push to open the door.

- 1 To display/cancel the main menu, press the **MENU** button.
- 2 Press the **P +** button to select a menu item.
- 3 Press the volume  buttons or **- P +** to display the submenu and to adjust the settings.
- 4 Press the **- P +** button repeatedly to return to the main menu.

When the main menu is not displayed, the **- P +** buttons enable you to select the TV channels, the  buttons to adjust the volume.

*The selected adjustment automatically switches off when no action has been executed within 10 seconds.*

PICTURE  
SOUND  
**FEATURES**  
INSTALL

**FEATURES**  
TIMER  
**AUTOLOCK**  
PIP  
CLOSED CAP  
FORMAT  
ROTATION  
BLUE MUTE  
ACTIVE CTRL

**AUTOLOCK**  
BLOCK CHANNEL  
SETUP CODE  
CLEAR ALL  
MOVIE RATING  
TV RATING  
BLOCK OPTIONS

## Autolock™

This TV allows you to control access to individual programs based on program content advisories sent by broadcasters or other program providers. All settings apply to all AV inputs, TV and external sources.

TV channels and programming that is not rated, is unrated, or has no rating may also be blocked.

### Setting up the Access Code

A channel blocked by the AutoLock™ control cannot be viewed until a correct access code is used to unlock the channel for viewing.

- 1 Select **AUTOLOCK** in the **FEATURES** menu.
- 2 Press the cursor right to enter the **ACCESS CODE**.
- 3 Enter the access code 0711 (the default access code) with the digit buttons. A message **INCORRECT** will appear on the screen.
- 4 Enter the access code 0711 a second time. The message **ENTER NEW CODE** will appear.
- 5 Enter a new four-digit code. The message **CONFIRM CODE** will appear.
- 6 Enter your new four-digit code again. The message **CORRECT** will flash briefly and the menu **AUTOLOCK** reappears.

*Note: you have forgotten your access code !*

*Follow the instructions as described in Setting up the Access Code.*

### Change the Access Code

This function allows you to change your personal Access Code.

- 1 Select **SETUP CODE** to enter an access code of your choice.
- 2 Press the cursor right to enter the **SETUP CODE** mode.
- 3 Enter the access code of your choice and confirm it again. The message **CORRECT** will appear and the **AUTOLOCK** menu reappears.

### Activating the Autolock™

- 1 Select **BLOCK CHANNEL** in the **AUTOLOCK** menu.  
*Note: Enter the Access Code if requested. See above.*
- 2 Press the cursor right to enter the **BLOCK CHANNEL** mode.
- 3 Use the cursor up/down to select the channel you want to block.
- 4 Press the cursor right to block the channel.  
A padlock image appears to the right of the channel number.
- 5 Repeat steps 3 and 4 for any channels you want to block from viewing.

*Notes:*

- You also can block out the use of the AV external inputs on the rear of the TV. Select AV1, AV2, AV3 (front) or AV4 and then select **BLOCK CHANNEL**.
- To watch a blocked channel, enter your access code or change the block channel option back to off by repeating steps 3 to 4 above.
- To clear all blocked channels at once, select **CLEAR ALL** in the **AUTOLOCK** menu and press the cursor right.  
The message **CLEARED** will appear.  
All blocked channels are now viewable.  
This control clears blocked channels only and will not clear any channels being blocked by Movie Ratings, TV Ratings, No Rating, or Unrated settings. See further.

```

AUTOLOCK
BLOCK CHANNEL
SETUP CODE
CLEAR ALL
MOVIE RATING
TV RATING
BLOCK OPTIONS

```

```

MOVIE RATING
G
PG
PG-13
R
NC-17
X

```

### Blocking by Movie Rating

This function allows you to control access to individual movies based on their MPAA ratings (Motion Picture Association of America).

Enter your Access Code if requested. See above.

- 1 Select **MOVIE RATING** with the cursor down.
- 2 Press the cursor right and a list appears, showing all valid MPAA content ratings.
- 3 Press the cursor up/down to select a movie rating.
- 4 Press the cursor right to turn the rating **ON** or **OFF**.  
Turning the rating **ON** will block programs with that rating from being seen.  
*Note: When a rating is turned on, all higher ratings also will be turned on automatically.*
- 5 Press the **MENU/SELECT** button to return to the **AUTOLOCK** menu.

### Movie Ratings (Motion Picture Association of America)

- G General Audience** - All ages admitted.  
Most parents would find this programming suitable for all ages.  
This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.
- PG Parental Guidance Suggested**  
This programming contains material that parents may find unsuitable for younger children. It may contain one or more of the following: moderate violence, some sexual situations, infrequent coarse language, or some suggestive dialogue.
- PG-13 Parents Strongly Cautioned**  
This programming contains material that parents may find unsuitable for children under the age of 13. It contains one or more of the following: violence, sexual situations, coarse language, or suggestive dialogue.
- R Restricted**  
This programming is specifically designed for adults. Anyone under the age of 17 should view this programming only with an accompanying parent or adult guardian. It contains one or more of the following: intense violence, intense sexual situations, strong, coarse language or intensely suggestive dialogue.
- NC-17 No one under the age of 17 will be admitted**  
This type of programming should be viewed by adults only.  
It contains graphic violence, explicit sex or crude, indecent language.
- X Adults only**  
This type of programming contains one or more of the following: very graphic violence, very graphic and explicit or indecent sexual acts, very coarse and intensely suggestive language.

```

AUTOLOCK
BLOCK CHANNEL
SETUP CODE
CLEAR ALL
MOVIE RATING
TV RATING
BLOCK OPTIONS

```

```

TV RATING
TV-Y
TV-Y7
TV-G
TV-PG
TV-14
TV-MA

```

## Blocking by TV Rating

You can also select specific age-based TV ratings and a corresponding context-based ratings list.

Enter your Access Code if requested. See above.

- 1 Select **TV RATING** with the cursor down.
- 2 Press the cursor right and a list appears, showing all age-based TV ratings.
- 3 Press the cursor up/down to select a TV rating.
- 4 Press the cursor right to turn the rating **ON** or **OFF**.  
Turning the rating **ON** will block programs with that rating from being seen.  
*Note: More specific context-based subratings, for violence (V), sexual content (S), dialogue (D), or fantasy violence (FV), are available for TV-Y7, TV-PG, TV-14 and TV-MA.*
- 5 Press the cursor right to access these subratings.
  - Press the cursor up/down to select the subrating that you want to block or unblock.
  - Press the cursor left/right to turn the block on the subrating **ON** or **OFF**.
- 6 Press the **MENU/SELECT** button to return to the **AUTOLOCK** menu.

*Note: When an item on the age-based TV rating list is selected, all items below that item of the same group are blocked as well.*

*When a content-based rating is selected, all identical content-based ratings in the younger age-based categories are also selected.*

## TV Parental Guidelines (TV broadcasters)

### TV-Y All children

*This program is designed to be appropriate for all children*

**Designed for a very young audience, including children ages 2-6.**

**This type of programming is not expected to frighten younger children.**

### TV-Y7 Directed to older children

*This program is designed for children ages 7 and above.*

**It may be more appropriate for children who have acquired the development skills needed to distinguish between make-believe and reality. This programming may include mild fantasy and comic violence (FV).**

### TV-G General Audience

*Most parents would find this program suitable for all ages.*

**This type of programming contains little or no violence, no strong language, and little or no sexual dialogue or sexual situations.**

### TV-PG Parental Guidance suggested

*This program contains material that parents may find unsuitable for younger children.*

**This type of programming contains one or more of the following: moderate violence (V), some sexual situations (S), infrequent coarse language (L), or some suggestive dialogue (D).**

### TV-14 Parents strongly cautioned

*This program contains some material that many parents would find unsuitable for children under 14 years of age.*

**This type of programming contains one or more of the following: intense violence (V), intense sexual situations (S), strong, coarse language (L), or intensely suggestive dialogue (D).**

### TV-MA Mature Audience Only

*This program is specifically designed to be viewed by adults and therefore may be unsuitable for children under 17.*

**This type of programming contains one or more of the following: graphic violence (V), explicit sexual situations (S), or crude, indecent language (L).**

AUTOLOCK  
 BLOCK CHANNEL  
 SETUP CODE  
 CLEAR ALL  
 MOVIE RATING  
 TV RATING  
 BLOCK OPTIONS

BLOCK OPTIONS  
 BLOCKING  
 BLOCK UNRATED  
 NO RATING

MOVIE RATING	-	TV RATING	-
	-		Y7
	-		-
	R		PG
	NC17		14
	X		MA

BLOCK UNRATED	ON
NO RATING	OFF

## Block options

The blocking control is what can be thought of as the *master switch* for AutoLock™. This control affects the settings you have chosen for blocking programs according to movie ratings or TV ratings, or for blocking programs that have no rating or are unrated.

Enter your access code if requested. See above.

## Blocking

- 1 Select **BLOCK OPTIONS** in the **AUTOLOCK** menu.
- 2 Press the cursor right to enter the **BLOCK OPTIONS** menu.
- 3 **BLOCKING** is highlighted.  
Press the cursor right to toggle **BLOCKING ON** or **OFF**.  
When the blocking control is **OFF**, the blocking of programs is disabled.  
When the blocking control is **ON**, blocking will occur according to the settings you have chosen.
- 4 Press the **MENU/SELECT** button to return to the **AUTOLOCK** menu.

## Block unrated programs

In addition to blocking specific ratings or channels, you may choose to block all programming that is unrated.

- 1 Select **BLOCK UNRATED** in the **BLOCK OPTIONS** menu with the cursor down.
- 2 Press the cursor left/right to toggle **BLOCK UNRATED ON** or **OFF**.  
*Note: UNRATED programming is encoded with information from the MPAA or TV-broadcasters, but they have not chosen to assign a rating to the programming.*
- 3 Press the **MENU/SELECT** button to return to the **AUTOLOCK** menu.

## Block programs with no ratings

Some programming is not encoded with content advisory data by the MPAA or the TV broadcaster.

All programming with no content advisory data can be blocked if **NO RATING** is set to **ON**.

- 1 Select **NO RATING** in the **BLOCK OPTIONS** menu with the cursor down.
- 2 Press the cursor left/right to toggle **NO RATING ON** or **OFF**.
- 3 Press the **MENU/SELECT** button to return to the **AUTOLOCK** menu.

## Reviewing the AutoLock™ settings

If **BLOCKING** is set to **ON** in the **BLOCK OPTIONS** menu you can review your **AUTOLOCK** settings.

- 1 Press the **STATUS/EXIT** button on your remote control twice.  
The **AUTOLOCK** settings will appear on the screen.  
*Note: Subratings will not appear in the review. The subratings however, are still blocked according to your selections.*  
*If the main rating is turned OFF but the subrating is turned ON, the program will be blocked; however, the rating will not appear within the AUTOLOCK review menu.*
- 2 Press the **STATUS/EXIT** button again to remove the settings from the screen, or wait until they leave the screen automatically.



#### FEATURES

TIMER

AUTOLOCK

PIP

**CLOSED CAP**

FORMAT

ROTATION

BLUE MUTE

### Closed Captions

Closed Captioning allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, this feature uses on screen *text boxes* to show dialogue and conversations while the TV program is in progress. Captions will appear on the screen during captioned broadcasts.

*Note: The captions do not always use correct spelling and grammar.*

*Not all TV programs and product commercials are made for broadcast with Closed Caption information included. Refer to your area's TV program listings for the TV channels and times of Closed Caption shows. The captioned programs are usually noted in the TV listings with service marks such as 'CC'.*

- 1 Select **CLOSED CAP** with the cursor down in the **FEATURES** menu.
- 2 Press the cursor right.
- 3 Select **CAPTION MODE**.
- 4 Press the cursor right.
- 5 Select the desired caption mode with the cursor up/down.
  - **TXT 1, 2, 3 or 4**  
Often used for channel guide, schedules, bulletin board information for Closed Caption programs, news, weather informations or stock market reports.
  - **CC 1, 2, 3 or 4**  
Dialogue (and descriptions) for the action on the captioned TV program shows on screen.  
Usually CC 1 is the most used.  
CC 2 may be used for alternate languages if they are being transmitted.

When **CC MUTE** is selected, the TV will display the currently selected caption mode when the mute function is active. When the mute function is not active, the TV will not display Closed Captions information.

*Note:*

- When a PIP or Dual Screen Format is selected, Closed Captioning (if activated) appears for the main screen only, and it covers the full screen.
- Not all Caption Services are necessarily being used by a TV channel during the transmission of a Closed Caption program.
- This television receiver provides display of television closed captioning conforming with the EIA-608 standard and in accordance with Sections 15.119 of the FCC rules.

- 6 Press the cursor left/right to return to the **CLOSED CAP** submenu.
- 7 Select **CC DISPLAY** with the cursor down.
- 8 Press the cursor right to select **CC DISPLAY ON** or **OFF** to turn Closed Caption off or on if the TV channel broadcasting is making closed captioning available.

Press the **MENU/SELECT** button to return to the **FEATURES** menu.

*Note: You can also press the CC button on the remote control to turn the CC TEXT option on or off.*

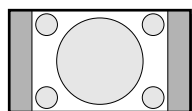
#### FEATURES

TIMER  
AUTOLOCK  
PIP  
CLOSED CAP  
FORMAT  
ROTATION  
BLUE MUTE  
ACTIVE CTRL

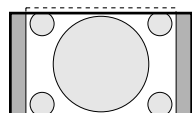
#### FEATURES

PIP

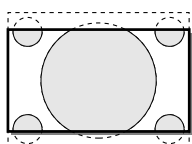
◀ TINT ▶



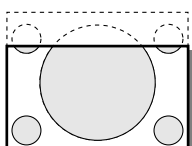
4:3



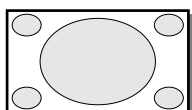
ZOOM 14:9



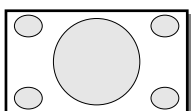
ZOOM 16:9



SUBTITLE ZOOM



WIDE SCREEN



SUPERWIDE

#### Adjusting the PIP tint setting *(not available for digital signals via AV4)*

There is a separate **TINT** control for PIP (Picture-in-Picture).

- 1 Select **PIP** in the **FEATURES** menu.
  - 2 Press the cursor right to shift the display to the **TINT** adjustment bar. A PIP window appears on the screen.
  - 3 Press the cursor left/right to adjust the **TINT** bar to the desired level.
  - 4 Press the cursor up to turn PIP **OFF** and to return to the **FEATURES** menu.
- More about the PIP feature, see p. 20.

#### Selecting the screen format

You have the choice of selecting different screen formats: **4:3**, **ZOOM 14:9**, **ZOOM 16:9**, **SUBTITLE ZOOM**, **WIDE SCREEN**, **AUTO** and **SUPERWIDE**.

- 1 Select **FORMAT** in the **FEATURES** menu.
  - 2 Press the cursor right repeatedly to cycle through the different screen formats and select your desired format.
- Note: You can also select the screen format with the cursor left/right.*
- **4:3**: the picture is reproduced in 4:3 format and black bars are displayed on both sides of the screen.
  - **ZOOM 14:9**: the picture is enlarged to 14:9 format. Thin black bars are displayed on both sides of the screen.  
With menu off, you can make subtitles visible with the cursor up/down;
  - **ZOOM 16:9**: the picture is enlarged to 16:9 format. This format is recommended when displaying picture which have black bars at the top and the bottom (letterbox format).  
With menu off, you can move the picture up or down with the cursor up/down;
  - **SUBTITLE ZOOM**: this format is used to display 4:3 pictures using the full surface of the screen and making the subtitles visible.  
With menu off, you can move the picture up or down with the cursor up/down;
  - **WIDE SCREEN**: this format restores the correct proportions of pictures transmitted in 16:9 using full screen display.  
*Note: If you display a 4:3 picture in this format, it will be enlarged horizontally.*
  - **SUPERWIDE**: this format is used to display 4:3 pictures, using the full surface of the screen by enlarging the sides of the picture.  
With menu off, you can move the picture up or down with the cursor up/down.
  - **AUTO**: auto will select the correct screen format, provided the specific signals are transmitted with the programs.  
*Note: This automatic format can also be modified manually.*

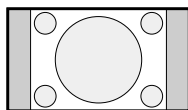
### Selecting the correct mode

Different formats can be selected to suit different picture format transmissions.

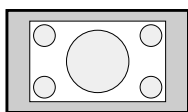
Use the following diagrams as a guide to which format to select.

Use the cursor left/right.

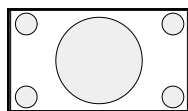
#### Transmission



4:3



4:3 letterbox



16:9

#### Format to select

ZOOM 14:9; ZOOM 16:9;  
SUBTITLE ZOOM; SUPERWIDE

ZOOM 16:9

WIDE SCREEN

### Rotation

- 1 Select **ROTATION** in the **FEATURES** menu.
- 2 Keep the cursor left/right pressed to adjust the rotation of the picture.
- 3 Press the **STATUS/EXIT** button to switch menu off.

### Activating Blue mute *(not available for signals via AV4)*

The Blue mute feature indicates to you the absence of signal in the transmission when **BLUE MUTE ON** is activated.

The screen will turn blue in color when no signal is detected.

- 1 Select **BLUE MUTE** in the **FEATURES** menu.
- 2 Press the cursor right to select **ON** to activate the blue mute feature.
- 3 Press the **STATUS/EXIT** button to switch menu off.

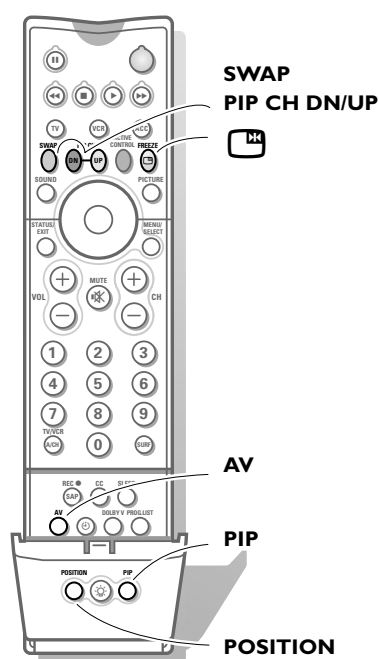
### Activating Active Control *(not available for digital signals via AV4)*

See Use of the remote control, p. 7.

- 1 Select **ACTIVE CTRL** in the **FEATURES** menu.
- 2 Press the cursor right to select **ON** to activate automatic control of Sharpness and Noise Reduction.
- 3 Press the **STATUS/EXIT** to switch the menu off.

## PIP (Picture in Picture) / Dual Window

(not available for digital signals via AV4)



The Picture-in-Picture feature allows you to call up a subscreen within your main screen enabling you to watch two channels or a channel and a peripheral at the same time.

The Dual Window feature allows you to divide the main screen into two subscreens enabling two channels or a channel and an external source to be watched simultaneously.

- 1 Press the **PIP** button on the remote control to switch on PIP.
- 2 Press the **PIP** button a second time to change the normal size PIP screen to a smaller size.
- 3 Press the **PIP** button a third time to switch to Dual Window screen in 4:3 format.
- 4 Press the **PIP** button a fourth time to switch to Dual Window screens in 16:9 format.
- 5 Press the **PIP** button a fifth time to switch to full screen again.

### Selecting PIP channels and external sources

The picture for the PIP/Dual Window screen can come through either the Antenna/Cable or any of the external AV connections (except AV4) at the rear of the TV.



### Selecting Dual Screen channels

- 1 Turn the TV and VCR or other device hooked on the external AV connections on.
- 2 Press the **PIP** button on the remote control.
- 3 Press the **CH +/-** button to cycle through the TV channels in the left picture.
- 4 Press the buttons **PIP CH UP/DN** to cycle through the channels in the right picture.

### Moving the PIP screen

Press the button **POSITION** on the door of the remote control. Each time you press this button, the PIP screen moves to another corner of the main screen.

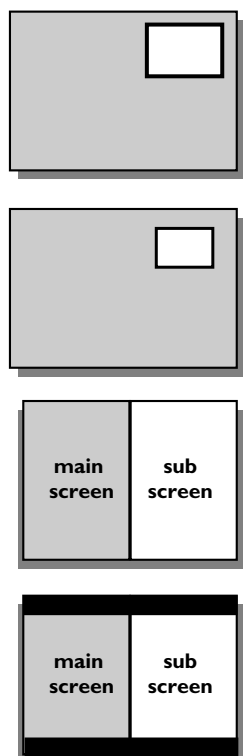
### Freeze the PIP screen.

Press the  button.  
The picture in the PIP screen stands still.  
Press the  button again to unfreeze the PIP screen.

### Switching screens

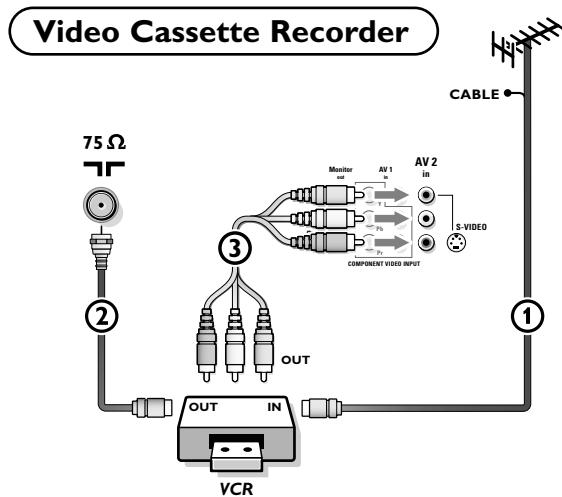
Press the **SWAP** button.  
The main screen and the PIP screen exchange places.  
In Dual Window the left and the right picture exchange places.

*Note: There is a separate TINT control possible for the picture in the PIP or Dual Window screen. See Features, Adjusting the PIP tint settings, p. 18.*



# Connect Accessory Devices

There is a wide range of audio and video devices that can be connected to your TV. The following connection diagrams show you how to connect them.



- ① Connect the RF Antenna or Cable TV cable (eventually via an optional two-way signal splitter and/or Cable TV converter box) ① to the **RF IN** socket of your VCR.
- ② Connect another RF cable ② from the output **OUT** of your VCR to the TV's input **75  $\Omega$**  jack.
- ③ Better playback quality can be obtained if you also connect the Video, Audio Left and Right (only for stereo devices) AV cables ③ to the **VIDEO**, **L/Mono** and **R AUDIO** input **AV2 IN** jacks.

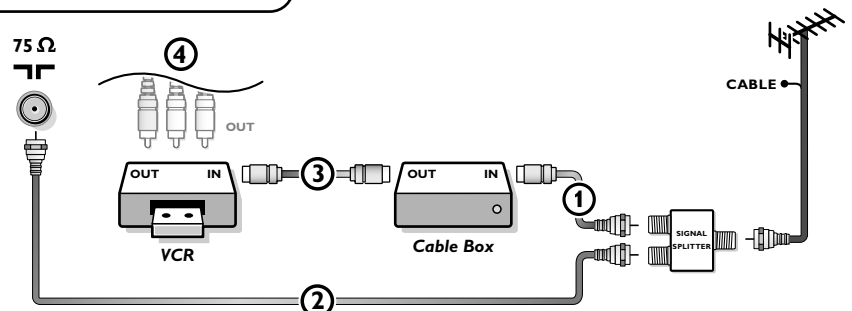
The **MONITOR OUT** connectors can be used for daisy chaining or to record programs from your TV. See Record with your VCR, p. 30.

## If your VCR has an S-VHS video jack:

For improved picture quality, connect an S-video cable with the **S-VIDEO** input instead of connecting the VCR to the **VIDEO** jack of **AV2 IN**.

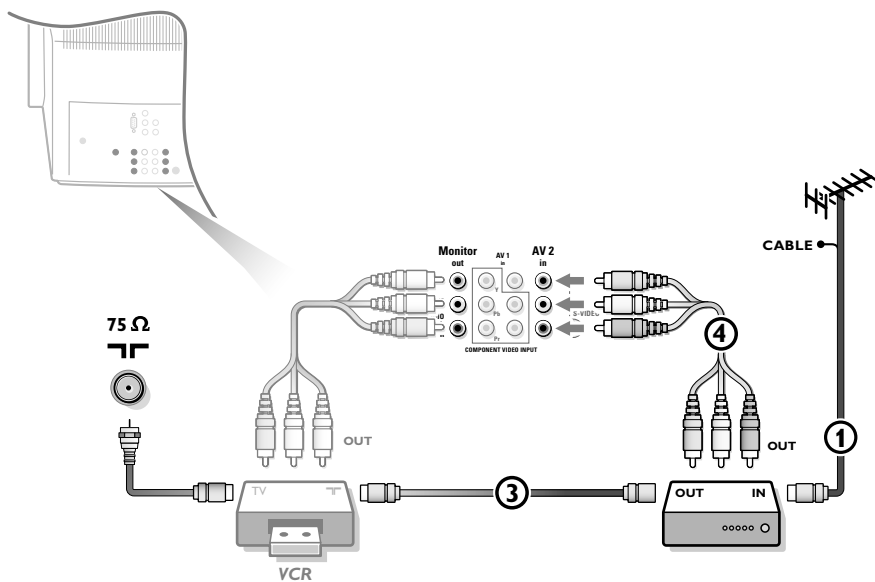
S-Video does not provide audio, so audio cables must still be connected to provide sound.

## VCR and Cable Box



- ① Use an optional signal splitter
- ② Connect one of the cable TV signal splitter outputs ① to the cable box's in jack.
- ③ Connect the other cable TV signal splitter output ② to the **75  $\Omega$**  ① plug on the back of the TV.
- ④ Connect the cable box's **OUT** jack ③ to the VCR's **RF IN** socket.
- ⑤ Connect the Video, Audio Left and Right (only for stereo sound) AV cables ④ to the **VIDEO**, **L** and **R AUDIO** input **AV2 IN** jacks on the TV.

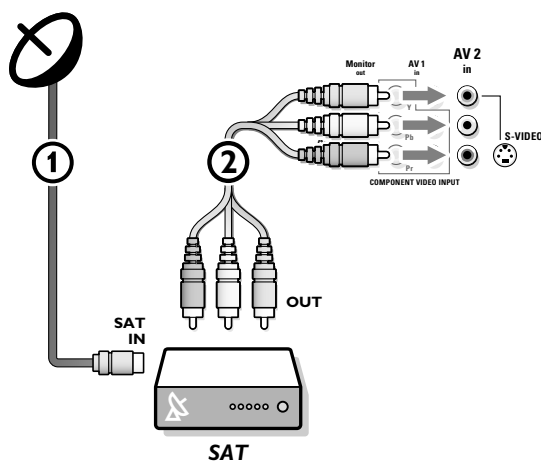
**Video recorder and other A/V devices**



- 1 Interconnect your video recorder with extra RF cables ③.
- 2 To obtain better picture quality, also connect the Video, Audio left and Audio right (only for stereo devices) cables to the **VIDEO, AUDIO L/Mono** and **AUDIO R** input of **AV2 IN** jacks ④.  
See Connect Video Cassette Recorder on previous page.

Note: AV1 IN can handle CVBS and Y-Pb-Pr; AV2 IN CVBS and Y/C;  
AV4 IN digital signals of a digital HD receiver; AV3 (front) CVBS and Y/C.

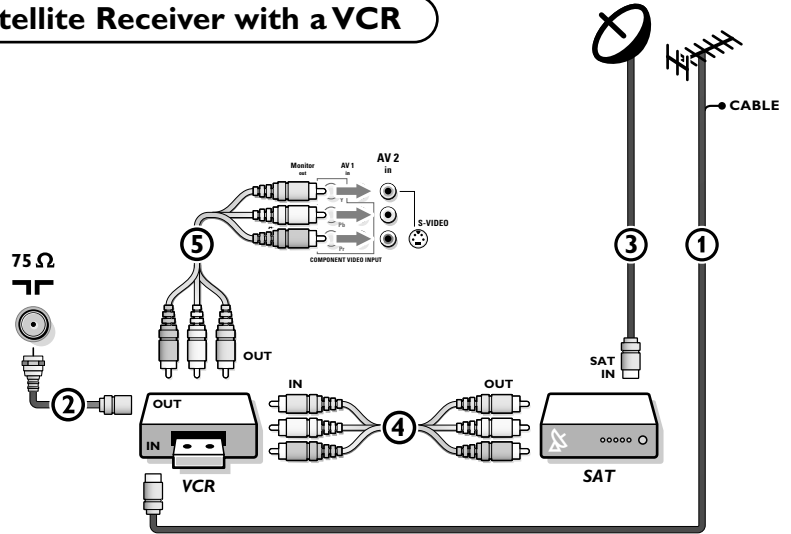
## Satellite Receiver




- ➊ Connect the satellite antenna cable ➊ to the satellite receiver's **SATELLITE IN** jack.
- ➋ Connect the Video, Audio left and right (only for stereo devices), AV cables ➋ to the **VIDEO**, **L/Mono** and **R AUDIO** input **AV2 IN** jacks.

**If your satellite receiver has an S-VHS video jack:**  
For improved picture quality, connect an S-VHS video cable with the **S-VIDEO** input instead of connecting the satellite receiver to the **VIDEO** jack of **AV2 IN**.

### Satellite Receiver with a VCR

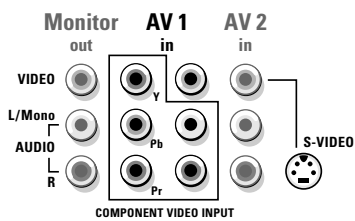


- 1 Connect the RF Antenna or Cable TV cable ① to the **RF IN** socket of your VCR.
- 2 Connect another RF cable ② from the output of your VCR to the TV's 75  $\Omega$   jack.
- 3 Connect the satellite antenna cable ③ to the satellite receiver's **SATELLITE IN** jack.
- 4 Connect the AV cables ④ to the satellite receiver's **AV OUT** jacks and to the VCR's **AV IN** jacks.
- 5 Connect the VCR's **AV OUT** jacks ⑤ to the TV's **AV2 IN** jacks.

**DVD Player or other accessory digital source equipment**

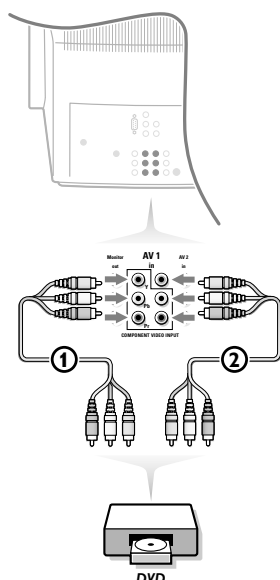
### Equipment with VIDEO connectors only

- 1 Connect the video cables to the equipment's **AV OUT** jacks and to the TV's **AV1** or **AV2 IN** jacks.
- 2 Connect the audio cables to the equipment's **AUDIO L/Mono** and **R** jacks and to the **L/Mono AUDIO** and **R AUDIO AV1** or **AV2** jacks on the TV. (According to where you connected the video cables, to **AV1** or **AV2**.)



### Equipment with an S-VIDEO connector

- 1 Connect an **S-VIDEO** cable to the **AV2 S-VIDEO** input.  
*Note: When using the **S-VIDEO** connector **DO NOT CONNECT** any device to the **VIDEO** input.*
- 2 Connect the audio cables to the equipment's **AUDIO L/Mono** and **R** jacks and to the **L/Mono AUDIO** and **R AUDIO AV2** jacks on the TV.



### Equipment with Component Video Output Connectors (DVD, Set Top Box,...)

- 1 Connect the cables of your **Y-Pb-Pr** equipment ① to the **Y-Pb-Pr** input **AV1 IN** sockets on the TV.
- 2 For reproduction of CVI (Component Video Input) and in order to have correct picture reproduction, also connect a video cable to **VIDEO** of **AV1** ②.  
*Note: This connection is used for AV1 (CVBS) and for CVI sync.*
- 3 Connect the Audio left and right (only for stereo equipment) cables ② to the **AUDIO L/Mono** and **R** input of **AV1**.

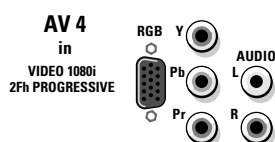
*Remark: Equipment may also be connected to the **AV IN** jacks (**AV3**) at the front side of the TV.*

### Equipment with Progressive Scan output (480p or 1080i 2 Fh)

Connect the equipment to the **AV4 IN** jacks on the TV.  
See AV4 Digital HD input, below.

## AV4 Digital High Definition input

When you have digital equipment with a 480p or 1080i output (e.g. a digital Set top Box or Progressive DVD player), connect it to the **AV4 IN VIDEO 1080i or 2 Fh PROGRESSIVE** input.



Connect the equipment with 2 Fh RGB output to the **RGB** connector and to the **L** and **RAUDIO** jacks.

Connect the equipment with 2Fh Y, Pb, Pr output to the **Y, Pb** and **Pr** jacks and to the **L** and **RAUDIO** jacks.

See also the manual of your High Definition equipment.

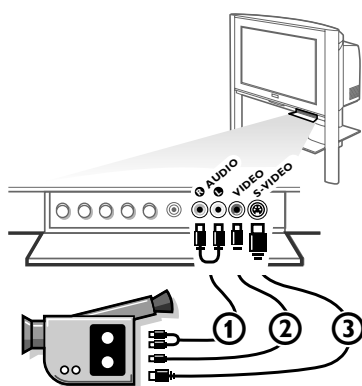
*Note: This television is designed to accept high definition signal standards 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3. Digital equipment from different manufacturers has the possibility of differing output standards which may cause difficulties for the television to properly display.*

*Warning: in case you notice scrolling images, wrong colors or no color, no picture, or even combinations of these on your screen, check if the connections are done in the right way.*

*The AV4 input **can not** be used to connect a computer or any other VGA device.*



## Camera and Camcorder

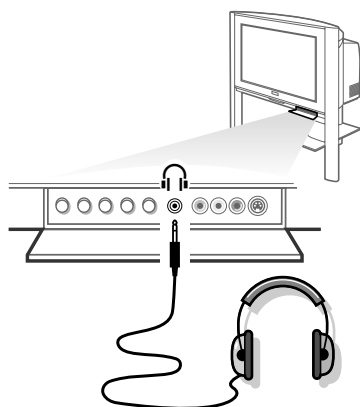




- ① Connect your camera or camcorder to the **AV3** inputs at the front side of your TV.
- ② Connect the device to **VIDEO ②** and **AUDIO L ①** for mono devices.
- ③ For stereo devices also connect **AUDIO R ①**.

S-Video quality with an S-VHS, Hi-8 or Digital camcorder is obtained by connecting the S-Video cables with the **S-VIDEO** input ③ (instead of **VIDEO ②**) and **AUDIO** inputs ①.

*Note: If you prefer, you can also connect the camcorder to one of the TV's rear AV IN jacks.*

## Headphones



- ① Insert the plug into the headphone socket  at the front side of the TV.
- ② Turn down the volume on the TV or press  on the remote control to switch off the internal speakers of the TV.

*The headphone impedance must be between 8 and 4000 Ohms.*

*The headphone socket has a 3.5 mm mini stereo jack.*

In the **SOUND** menu select **Headphone** to adjust the headphone volume and balance.

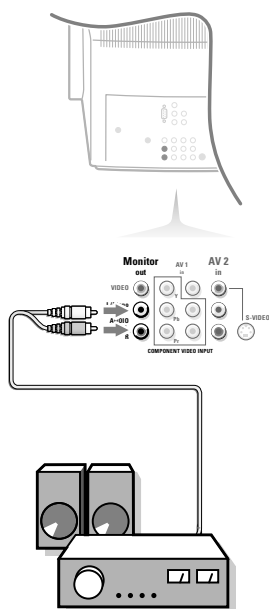
*Note: When PIP/Dual Window is activated (see p. 20):*

- if the main screen displays a TV channel picture, you hear the sound from the PIP/Dual Window picture through your headphone;
- if the main screen displays a picture from an external source, you hear the sound from the main screen through your headphone.

## Additional Audio Connections

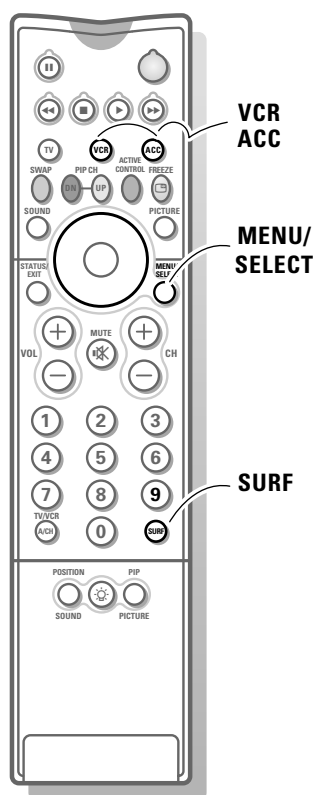
Would you like to hear TV programs through your audio hi-fi system?

The TV's Audio Output jacks and **SPEAKERS ON/OFF** control work together to offer you this TV sound option.



- ① Connect the audio cables to the **AUDIO L** and **R** input jacks of your amplifier and to the **AUDIO L/Mono** and **R MONITOR OUT** jacks on the TV.
- ② Turn the TV and audio system on.
- ③ Select **SPEAKER** in the **SOUND** menu. See Operation, Sound menu, p. 11.
- ④ Select **SPEAKERS ON** or **OFF**, whether you want to route audio via the internal TV speakers or via the external audio system.

## Setting the remote control to work accessory devices



Your remote control is set to work your TV and many infrared remote (IR) control VCRs, Cable TV Converter Boxes, DVD players, Satellite Receivers, etc.

Press the **VCR** or **ACC** button according to the accessory device you want to operate with this remote control.

If the function buttons on the remote control also work the selected accessory device, then the remote is ready and no further steps are needed.

### If the functions buttons do not work the selected accessory device

According to the device(s) you own, you may make your remote control ready for them by a direct entry code. Proceed as following.

- 1 Look up a three-digit remote control number for your brand of devices. See pages 27-28.  
If more than one number is listed, you may have to try more than one code in order to locate your device's remote code.
- 2 Press and hold the proper device button **VCR** or **ACC** and press simultaneously the **MENU/SELECT** button, then release.
- 3 Enter, within 30 seconds, the three-digit remote code number for your desired device. The remote is now ready to send commands to the unit.  
*Note: If no code or an incomplete code is entered within 30 seconds, the backlight and selected mode button will turn off and give a long blink before returning to the previous programmed code.*
- 4 Point the remote at the device.  
Press the **POWER** button on the remote to turn the unit on.  
*Remember: If this doesn't work the first time, repeat the steps using the same remote code number. After second try and the remote does not operate your device, see if there is another four-digit code number listed for your device. Repeat the steps above using the new number. If, after repeated attempts, the remote does not work your device, try the Auto Search method following.*

### Auto Search method

- 1 Turn on the desired device by pressing the **POWER** button on the device you are attempting to program.
- 2 Press and hold the proper mode button **VCR** or **ACC** and press simultaneously the **SURF** button, then release.  
The device will begin to change channels after the remote identifies the correct code.
- 3 When the channels start to change, release the **VCR** and **SURF** buttons.  
The remote should be ready to operate the device  
*Note: If any other button is pressed during Auto Search, the search will be ended. The remote keeps its previous code.  
For devices DVD and CD, insert a disc and press PLAY on the device.  
The remote control will send the command next track.  
Switch AV receivers to TUNER function.*

This method can take up to two minutes to perform.

Don't let the device change more than five channels after the remote identifies the code.

If no channel change happens within two minutes, repeat the steps mentioned above. Should a channel change still not occur, the remote will not work the desired device.

## Remote Control Direct Entry Codes for Accessory Devices

### Cable Remote Code No.

ABC	.030, 028, 034, 035, 038, 040, 041, 044
Allegro	.180, 342
Antronix	.049, 234
Archer	.049, 066, 180, 234, 824
BBT	.294
Belcor	.083
Bell & Howell	.041
Cable Star	.083
Cabletenna	.049
Cableview	.049
Century	.180
Citizen	.180, 342
Colour Voice	.052, 058
Comband	.259
Comtronics	.067, 087
Contec	.046
Digi	.664
Eastern	.029
Emerson	.824
Everquest	.042, 067
Focus	.427
GC Electronics	.083, 234
GE	.259
Garrard	.180
Gemini	.042, 097, 269, 824
General Instrument	.303, 503, 038, 837
GoldStar	.067, 171
Goodmind	.824
Hamlin	.047, 036, 286, 061, 300
Hitachi	.038
Hytex	.034
Jasco	.042, 180, 342
Jerrold	.030, 039, 303, 041, 038, 503, 051
	.042, 837
Linsay	.467
Macom	.060
Magnavox	.054
Memorex	.027
Movie Time	.090, 183
NSC	.090, 183, 097
Novaplex	.645
Oak	.046, 034
Optimus	.048
Panasonic	.048, 134, 027
Panther	.664
Paragon	.027
Phillips	.052, 058, 269, 317, 054, 180
Pioneer	.171, 050, 560
Popular Mechanics	.427
Prelude	.797
Pulsar	.027
Quasar	.027
RCA	.048
Radio Shack	.042, 847, 342, 824
Realistic	.234
Recoton	.427
Regal	.300, 047, 286
Regency	.029
Rembrandt	.038, 097
Runco	.027
SL Marx	.067
Samsung	.067, 171
Scientific Atlanta	.035, 044, 033, 504
Seam	.537
Signal	.042, 067
Signature	.038
Sprucer	.048
StarSight	.569, 449
Starcom	.030, 042
Stargate	.067, 042, 797, 824
Starquest	.042

Sylvania	.028
TFC	.337
TV86	.090
Tandy	.285
TeleCaption	.248
Televue	.067
Texscan	.028
Timeless	.445
Tocom	.039, 040
Toshiba	.027
Tusa	.042
Unika	.180, 234, 049
United Artists	.034
Universal	.234, 049, 066, 083, 180, 218
Viewstar	.285, 054, 087, 090
Zenith	.027, 552, 081
Zentek	.427

### Satellite Remote Code No.

AlphaStar	.799
Amplica	.099
Amway	.070, 102
Arunta	.548
Astro Industries	.122
BMC	.114
BSR	.122
Cable Innovations	.581
Capetronic	.122
Century	.565
Channel Master	.045, 239
Chaparral	.080, 236, 243
Citoh	.191
Conifer	.031
Curtis Mathes	.088, 099
DX Antenna	.068
Drake	.091, 272, 045, 176
Echostar	.307, 802, 175, 186, 296
Expressvu	.802
General Instrument	.388, 896, 574, 581, 654
Gould	.082
HNS	.644
HTS	.802
Hitachi	.846
Homecable	.265
Hughes Network Systems	.776
Hytex	.122
IQ	.237
IQ Prism	.237
Intersat	.070
JVC	.802
Janeil	.179
Jerrold	.388, 654
Legend	.296
Macom	.088, 045
Magnavox	.749, 751
Memorex	.296, 751
Next Level	.896
Norsat	.01
Panasonic	.179, 728
Philips	.227, 749, 751
Pico	.102
Primestar	.654, 388
RCA	.593, 170, 882
Radio Shack	.581, 896
Ramsey	.102
Realistic	.079, 078
STS	.237, 068
Sony	.666
Star Choice	.896
Star Trak	.207, 448, 574
Strong	.448

Toshiba	.109, 776, 817, 088
Town & Country	.574
Uniden	.265, 079, 101, 397, 581, 751, .103, 323, 749
Zenith	.091, 883, 088

### VCR Remote Code No.

Admiral	.075, 236
Adventura	.027
Aiko	.305
Aiwa	.334, 495, 027, 064
Akai	.133, 080, 068, 076, 088, 183, 269
America Action	.305
American High	.062
Asha	.267
Audiovox	.064
Beaumarck	.267
Bell & Howell	.131
Brocksonic	.0236
Broksonic	.148, 211, 029, 236, 322, 388, 506
CCE	.099, 305
Calix	.064
Canon	.194, 062, 129
Capehart	.047
Carver	.108
Cineral	.305
Citizen	.305, 064
Colt	.099
Craig	.064, 099, 074, 267, 298
Curtis Mathes	.062, 068, 087, 189
Cybernex	.078, 267
Daewoo	.305, 588, 047, 072
Daytron	.047
Denon	.069
Dynatech	.027
Electrohome	.064
Electrophonic	.064
Emerex	.059
Emerson	.211, 029, 236, 305, 063, 148, 238, 235, 321, 506, 088, 115, 239, 027, 064, 070, 095, .322, 388, 537
Fisher	.074, 131, 081, 093
Fuji	.060, 062
Funai	.027
GE	.062, 087, 075, 092, 229, 267
Garrard	.027
Go Video	.306, 459, 553, 259
GoldStar	.064, 045, 065, 498, 507
Gradiente	.035, 027, 435
Grundig	.222
HI-Q	.074
Harley Davidson	.027
Harman/Kardon	.065, 102, 108
Harwood	.095, 099
Headquarter	.073
Hitachi	.069, 193, 132, 092, 027, 068, 109
Hughes Network Systems	.069
JVC	.094, 035, 233, 234, 068, 411
Jensen	.068
KEC	.064, 305
KLH	.099
Kenwood	.068, 094, 411, 065
Kodak	.062, 064
LXI	.064
Lloyd's	.027, 235
Logik	.099
MEI	.062
MGA	.070, 088, 267
MGN Technology	.267
MTC	.027, 267
Magnasonic	.305
Magnavox	.062, 108, 137, 130, 027, 066, 176

## Remote Control Direct Entry Codes for Accessory Devices

Magnin ..... 267  
 Marantz ..... 108, 062  
 Marta ..... 064  
 Matsushita ..... 062, 189, 481  
 Memorex ..... 131, 074, 506, 027, 064, 075,  
 062, 073, 267, 334, 066, 0189, 236, 481, 828, 829  
 Minolta ..... 132, 069  
 Mitsubishi ..... 070, 200, 088, 102, 241, 269,  
 ..... 075, 094, 470  
 Motorola ..... 062, 075  
 Multitech ..... 027, 099  
 NAD ..... 085  
 NEC ..... 065, 067, 068, 077, 094, 109, 131  
 Nikko ..... 064  
 Nikon ..... 061, 280  
 Noblex ..... 267  
 Olympus ..... 062, 253  
 Optimus ..... 189, 481, 075, 085, 064, 131,  
 ..... 459, 827, 828, 829  
 Optonica ..... 089  
 Orion ..... 506, 029, 211, 236, 322  
 Panasonic ..... 062, 189, 481, 253, 104, 405,  
 ..... 129, 252, 254, 273, 827, 828, 829  
 Penney ..... 062, 267, 064, 069, 065, 067, 081  
 Pentax ..... 069, 092, 132  
 Philco ..... 062, 236, 506  
 Philips ..... 108, 062, 089, 137, 830, 831  
 Pilot ..... 064  
 Pioneer ..... 085, 195, 094  
 Polk Audio ..... 108  
 Portland ..... 047  
 Profitronic ..... 267  
 Proscan ..... 087, 229  
 Protec ..... 099  
 Pulsar ..... 066, 078  
 Quarter ..... 073  
 Quartz ..... 073  
 Quasar ..... 062, 189, 104, 481, 828  
 RCA ..... 087, 176, 229, 069, 132, 062,  
 ..... 075, 092, 104, 133, 267, 304  
 Radio Shack ..... 027  
 Radix ..... 064  
 Randex ..... 064  
 Realistic ..... 027, 131, 074, 075, 064, 062, 089, 073  
 Ricoh ..... 061, 280  
 Runco ..... 066  
 STS ..... 069  
 Salora ..... 102  
 Samsung ..... 072, 078, 080, 267  
 Sanky ..... 066, 075  
 Sansui ..... 068, 506, 027, 094, 109, 236, 298  
 Sanyo ..... 074, 073, 131, 267  
 Scott ..... 211, 238, 148, 070, 072, 237, 239  
 Sears ..... 081, 132, 064, 069, 027, 062,  
 ..... 073, 074, 093, 131  
 Semp ..... 072  
 Sharp ..... 075, 089  
 Shintom ..... 099  
 Shogun ..... 078, 267  
 Singer ..... 099  
 Sony ..... 060, 061, 059, 280, 027, 038, 062  
 Sunpack ..... 280  
 Sylvania ..... 062, 108, 027, 070, 130, 137  
 Symphonic ..... 027  
 TMK ..... 063, 235, 267  
 Tatung ..... 068  
 Teac ..... 027, 068  
 Technics ..... 062, 189, 273  
 Teknika ..... 027, 062, 064, 079  
 Thomas ..... 027  
 Tivo ..... 0645  
 Toshiba ..... 072, 237, 239, 070, 093, 393  
 Totevision ..... 064, 267

Unitech ..... 267  
 Vector ..... 072  
 Vector Research ..... 065, 067  
 Video Concepts ..... 067, 072, 088, 248  
 Videosonic ..... 267  
 Wards ..... 062, 087, 089, 027, 074, 239,  
 ..... 267, 069, 075, 099, 108, 176  
 White Westinghouse ..... 099, 305, 236  
 XR-1000 ..... 099, 027, 062  
 Yamaha ..... 065  
 Zenith ..... 066, 027, 060, 061, 236, 506

### Digital Video Disc Remote Code No.

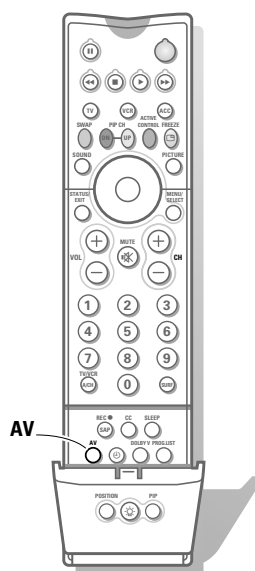
Denon ..... 859  
 GE ..... 862  
 Harman/Kardon ..... 871  
 JVC ..... 868  
 Kenwood ..... 865  
 Magnavox ..... 860  
 Marantz ..... 866  
 Mitsubishi ..... 861  
 Onkyo ..... 860  
 Optimus ..... 869  
 Panasonic ..... 859  
 Philips ..... 866, 860  
 Pioneer ..... 869, 863  
 Proscan ..... 862  
 RCA ..... 862  
 Samsung ..... 870  
 Sony ..... 864  
 Technics ..... 859  
 Theta Digital ..... 869  
 Toshiba ..... 860  
 Yamaha ..... 859, 867  
 Zenith ..... 872, 860

### Laser Disc Code No.

ADS ..... 880  
 Aiwa ..... 855  
 Carver ..... 853, 850, 858  
 Denon ..... 851, 875, 849  
 Disco Vision ..... 848  
 Funai ..... 855  
 Harman/Kardon ..... 853  
 Hitachi ..... 848  
 Kenwood ..... 877  
 Magnavox ..... 853, 857, 875  
 Marantz ..... 853, 850  
 Mitsubishi ..... 849  
 NAD ..... 849  
 NEC ..... 879  
 Nikkodo ..... 884  
 Optimus ..... 849  
 Panasonic ..... 856  
 Philips ..... 853, 850  
 Pioneer ..... 849, 848  
 Polk Audio ..... 853  
 Quasar ..... 856  
 RCA ..... 881, 874  
 Realistic ..... 855  
 Samsung ..... 858  
 Sega ..... 848  
 Sharp ..... 873  
 Sony ..... 854, 852, 878  
 Technics ..... 856  
 Theta Digital ..... 853  
 Victor ..... 876  
 Yamaha ..... 857

### Television Code No.

Philips ..... 583



## To select connected devices

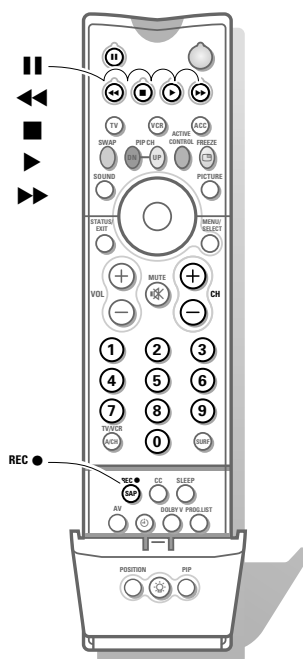
### Devices connected to the rear or to the front side of the TV

Press the **AV** button repeatedly to select **AV1**, **CVI**, **AV2**, **AV3** (front side), **AV4 1080i** or **AV4 480p** according to where you connected your device at the rear or the front side of your TV.

Select **CVI** to view the playback of DVD discs if you use the Component Video Input jacks (**Y-Pb-Pr**, **VIDEO IN** and **AUDIO L/Mono** and **R** inputs).

### If you want to change to TV channels?

Enter the channel number of the TV channel which you want to watch with the digit buttons.



## VCR Control buttons

Many audio and video devices can be operated with the remote control of your TV.

Press the **VCR** or **ACC** button according to the devices you want to operate with this remote control. See Use of the remote control, p. 7, or Setting the remote control to work accessory devices, p. 26.

### VCR buttons

After you pressed the **VCR** button, press one of the VCR buttons of the remote control:

**REC** + **▶** for record,

**II** for pause,

**◀◀** for rewind,

**■** for stop,

**▶** for play,

**▶▶** for fast forward,

**- CH +** for sequential channel selection from the video recorder tuner,  
0 to 9 to select a channel number from your video recorder tuner.

*These buttons function with devices that uses the RC5 signalling standard.*

---

## Record with your VCR

To record S-VHS quality, connect an S-VHS peripheral directly to the VCR.

### Record a TV program

You can record a TV program using your VCR's tuner without affecting your TV.

- 1 Select the channel number on your VCR.
- 2 Set your VCR to record.  
See the handbook for your VCR.

*Switching channel numbers on your TV does not disturb recording !*

### Record to VCR from MONITOR OUT

You can record a program on your VCR from the TV tuner via **MONITOR OUT**.

- 1 Switch on the device.
- 2 Select the correct channel on your TV.
- 3 Set your VCR to record.  
You record the tuner channel of the TV.

*Do not switch channels or turn off your TV when you are recording through **MONITOR OUT**.*

## Before Calling Service

Please make these simple checks before calling service. These tips may save you time and money since charges for television installation and adjustments of customer controls are not covered under your warranty.

Symptoms	Items to Check and Actions to follow
"Ghost" or double images	<ul style="list-style-type: none"> <li>This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.</li> </ul>
No power	<ul style="list-style-type: none"> <li>Check that the television's AC power cord is plugged into the mains socket.</li> <li>Unplug the television, wait for 60 seconds. Then re-insert plug into the mains socket and turn on the television again.</li> </ul>
No picture	<ul style="list-style-type: none"> <li>Check antenna connections at the rear of the television to see if it is properly connected to the television input terminal. Is it properly secured to the appropriate antenna plug on the TV?</li> <li>Check the <b>TUNER MODE</b> control for the correct tuner setting.</li> <li>Possible broadcast station trouble. Try another channel. Try running the Auto Program feature.</li> <li>Adjust the contrast and brightness settings. Try another picture setting.</li> <li>Check the Closed Captions control. Some TEXT modes could block the screen.</li> <li>Press the <b>AV</b> button on the remote to make sure the correct signal source is selected.</li> </ul>
Good picture but no sound	<ul style="list-style-type: none"> <li>Increase the VOLUME.</li> <li>Check that the television is not muted, press the <b>MUTE</b> button on the remote control.</li> <li>When no signal is detected, the television automatically switches off the sound. This is proper operation and does not indicate a malfunction.</li> <li>Check the <b>SPEAKER</b> on screen control. If it is in the <b>OFF</b> position, sound at the set will be eliminated.</li> <li>Check if your speaker configuration corresponds with the selections made in the Speakers Setting, p. 11.</li> <li>If you're attempted to hook up auxiliary devices, check the audio jack connections.</li> </ul>
Good sound but poor color or no picture	<ul style="list-style-type: none"> <li>Adjust the contrast and brightness setting. Try another auto picture setting.</li> </ul>
Poor picture	<ul style="list-style-type: none"> <li>Sometimes, poor picture quality occurs when having activated an S-VHS camera or camcorder connected to the front side of of your TV and another peripheral is connected to AV1 or AV2 at the same time. In this case, switch off one of the other peripherals.</li> </ul>
Snowish picture and noise	<ul style="list-style-type: none"> <li>Check the antenna connection.</li> </ul>
Disturbed picture on AV4	<ul style="list-style-type: none"> <li>When selecting AV4 and no signal is detected, the picture shows a disturbed behaviour. Check if your device is properly connected and/or if your device is switched on.</li> </ul>
Horizontal dotted line	<ul style="list-style-type: none"> <li>This may be caused by electrical interference (e.g. hairdryer, nearby neon lights, etc.)</li> <li>Turn off the device.</li> </ul>
One white line across the screen	<ul style="list-style-type: none"> <li>Turn off the television immediately and consult a qualified service personnel.</li> </ul>
Television not responding to remote control	<ul style="list-style-type: none"> <li>Check whether the batteries are working. Replace if necessary.</li> <li>Clean the remote control sensor lens on the television.</li> <li>Operating range between television and the remote control should not be more than 240".</li> <li>You can still use the buttons in front of your TV.</li> <li>Press the <b>TV</b> button to be sure your remote control is in the TV mode.</li> </ul>
Tv displays wrong channel or no channels above 13	<ul style="list-style-type: none"> <li>Repeat channel selection.</li> <li>Add the desired channel numbers (using the <b>CHANNEL EDIT</b> control) into the TV's memory.</li> <li>Check to be sure the <b>TUNER MODES</b> are set to the <b>CABLE</b> option and run the Auto Program feature to find all available channels.</li> </ul>

### If your problem is not solved

Turn your TV off and then on again once.

**Never attempt to repair a defective TV yourself.**

Check with your dealer or call a TV technician.

Telephone number Philips Customer Care Center

**800-531-0039**

## Tips

### Care of the screen

- To avoid possible shock hazard, be sure the TV is unplugged from the electrical outlet before cleaning.
- When you are cleaning the TV, take care not to scratch or damage the screen surface (avoid wearing jewelry or using anything abrasive). Wipe the front screen with a clean cloth dampened with water. Use even, easy, vertical strokes when cleaning.
- Gently wipe the cabinet surfaces with a clean cloth or sponge dampened in a solution of cool, clear water. Use a clean, dry cloth to dry the wiped surfaces.
- Never use thinners, insecticide sprays, or other chemicals on or near the cabinet, as they might cause permanent marring to the cabinet finish.

### End of life directives

We are paying a lot of attention to using environmentally-friendly production methods. Your new TV contains materials which can be recycled and reused. At the end of its life specialized companies can dismantle the discarded TV to concentrate the reusable materials and to minimize the amount of materials that must be disposed. Please ensure that you dispose of your old TV according to local regulations.

### How to dispose of batteries?

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

## Index

- a** active control, 7
  - antenna, 4
  - auto lock, 13
  - autoprogramming, 6
- b** backlighting, 8
  - bass, 10
- c** cable box, 21
  - camera/camcorder, 25
  - channel selection, 7
  - closed captions, 17
- d** dolby virtual, 8, 10
  - dual window/PIP, 20
  - DVD, 23
  - dynamic contrast, 9
- e** editing of channels, 6
- f** freeze, 7
- h** headphone, 25
- i** incredible surround, 8, 10
- k** keypad in front of the TV, 12
- m** menu language, 5
  - movie ratings, 14
  - mute, 7
- p** picture adjustments, 9
  - PIP, picture in picture, 20
  - PIP position, 8
- r** recording, 30
  - remote control, 7-8
  - rotation, 19
- s** SAP, 10
  - satellite receiver, 23
  - screen format, 18
  - set/change code, 13
  - sound adjustments, 10
  - speakers, 11
  - stereo, 10
  - surf, 8
  - S-VHS, 30
- t** timer, 11
  - tint, 18
  - treble, 10
  - turn TV on, 4
  - TV ratings, 15
- v** VCR functions, 29
  - video recorder, 21
  - volume, 7

### Regulatory Notices - Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio or television technician for help.

#### Modifications -

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Philips Consumer Electronics may void the user's authority to operate the equipment.

#### Cables -

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

#### Canadian notice -

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

#### Avis Canadien -

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



### Active Control

A set of automatic picture improvement algorithms applied to the video image.

### Alternate Channel

The feature that allows you to toggle between the last two channels viewed by pressing the A/CH buttons on the remote control.

### Auto Programming

The feature that, when activated, scans for all available channels from regular antenna or cable signals and stores only active broadcast stations in the TV's memory.

### Audio/Video Inputs

Located on the rear of the TV these connectors (RCA phono type plug) are used for the input of audio and video signals. Designed for use with VCRs (or other accessories) in order to receive higher picture resolution and offer sound connection options.

### Channel Edit

The feature that allows you to add or delete channels from the list of channels stored in the TV's memory. Channel Edit makes it easy to limit or expand the number of channels that are available to you when you press the CH + or - buttons on your remote control.

### Closed Captioning

The broadcast standard feature that allows you to read the voice content of television programs on the TV screen. Designed to help the hearing impaired, Closed Captioning uses on screen 'text boxes' to show dialogue and conversations while a TV program is in progress.

### Coaxial Cable

A single solid antenna wire normally matched with a metal plug (F-type) end connector that screws (or pushes) directly onto a 75 Ohm input found on the Television or VCR.

### CVBS

Stands for Composite Video Blanking Sync. At this level, the color, luminance and synchronization information are combined in one signal. The audio signal is transferred separately.

### Display

An on screen message or graphics that help the user operate and adjust TV feature controls. See On Screen Displays (OSD).

### Identify

The method by which a TV remote control searches and finds an operating code for another product (such as a VCR or a cable converter). After the code has been 'identified', the TV remote control can operate and send commands to the other product.

### Incredible Stereo (or Surround)

Acoustic management of the audio signal that produces a dramatic expansion of the wall of sound that surrounds the listener and heightens overall viewing pleasure.

### LED

Light Emitting Diode or indicator.

### Menu

An on screen listing of feature controls shown on the TV screen that are made available for user adjustments.

### MPAA

Motion Picture Association of America

### Multichannel Television sound (MTS)

The broadcast standard that allows for stereo sound to be transmitted with the TV picture.

### NTSC (analog video signals)

National Television Standards Committee format devised for TV broadcasting signals in the 1940s (525 lines: 30 Hz.)

### On Screen Displays (OSD)

Refers to the wording or messages generated by the TV to help the user with specific feature controls (color adjustment, programming, etc.)

### Picture and Sound Controls

Buttons on the remote control to select predefined picture and sound settings.

### Picture Freeze

TV mode which allows you to "freeze" a certain image in order to study a specific detail at ease, e.g. to make notes of certain program information like phone numbers.

### Picture-in-Picture

The showing of two pictures on the TV screen at the same time (one main screen picture and one small picture, or PIP).

### Programming

The procedure of adding or deleting channel numbers into the TV's memory circuits. In this way the TV 'remembers' only the locally available or desired channel numbers and skips over any unwanted channel numbers.

### Remote Control Sensor Window

The window or opening found on the television control panel and through which infrared remote control command signals are received.

### RF

Radio Frequency or modulated signal design used as the carrier for television broadcasts.

### Second Audio Program (SAP)

Another or additional audio channel provided for in the Multichannel Television Sound (MTS) broadcast standard. A monaural soundtrack included within the recorded or video signal (usually containing a second language translation for the displayed programming).

### Status/Exit button

The remote control function that allows to quickly confirm what channel number is being viewed. Status/Exit can also be used to clear the television of on screen displays or information (rather than waiting for the displays to 'time out', or automatically disappear from the screen).

### S-Video Input

Allows direct connection of high-resolution video sources, such as a Super VHS videocassette recorder, Laser Disc player, etc. Provides improved picture resolution, sharpness, and clarity.

### Tint

TV-function to modify the general color balance between cool and warm and to adjust it according to your personal preference.

### Twin-lead wire

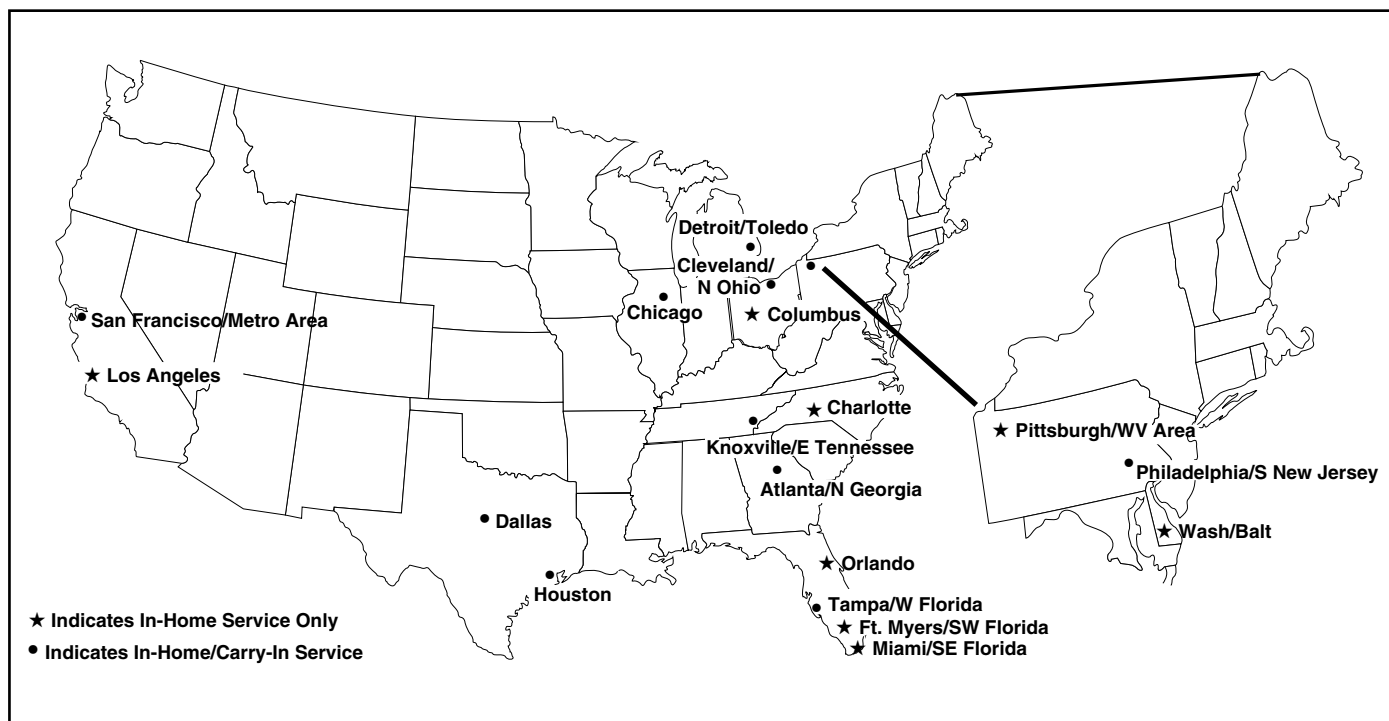
The more commonly used name for the two-strand, 300-ohm antenna wire used with many indoor and outdoor antenna systems. In many cases, this type of antenna wire requires an additional adapter (or balun) in order to connect to the 75-ohm input terminals designed into the more recent TVs and VCRs.

### Variable Audio Output

An adjustable audio output which allows for volume variations at the source.



## FACTORY SERVICE LOCATIONS



**NOTE:** If you reside in one of our Philips Factory Service Branch areas (see directory on back), you can contact the nearest Service Branch to obtain efficient and expedient repair for your product. If your product is In-Warranty, you should have proof-of-purchase to ensure No Charge Service. For Out-of-Warranty service, call the location nearest you.

**NOTA:** Si vous résidez dans une des régions desservies par une succursale de service après vente du fabricant Philips (voir liste ci-dessous), vous pourrez contacter la branche de service après vente la plus près de chez vous pour obtenir un service après vente rapide et efficace. Si le produit est sous garantie, il suffira de présenter une preuve d'achat pour bénéficier d'un service sans frais. Pour les produits non couverts par la garantie, contactez le centre le plus près de chez vous.

**NOTA:** Si Ud. reside en una de nuestras zonas para sucursales Philips de servicio al de fábrica (ver directorio más abajo), Ud. puede comunicarse con la sucursal de servicio más cercana para obtener una reparación oportuna y eficaz de su producto. Si su producto está todavía bajo garantía, Ud. debe presentar comprobante de compra para no ocasionar ningunos cargos por servicio. Para servicio después del vencimiento de la garantía, llame al lugar más cercano de los abajo indicados.

### In Canada

How you can obtain efficient and expedient carry-in, mail-in, or in-home service for your product

Please contact Philips at  
1-800-661-6162 (French speaking)  
1-800-363-7278 (English speaking)

### Au Canada

Comment obtenir le service après-vente pour les produits apportés ou envoyés par la poste à notre centre de service ou le service à domicile

Veuillez contacter philips à:  
1-800-661-6162 (Francophone)  
1-800-363-7278

### En el Canadá

Cómo recibir servicio eficiente para su producto, en persona, por correo o a domicilio

Favor de comunicarse con Philips al:  
1-800-661-6162 (francófono)  
1-800-363-7278 (anglófono)

# FACTORY SERVICE LOCATIONS



**QUALITY SERVICE IS AS CLOSE AS YOUR TELEPHONE! SIMPLY LOOK OVER THE LIST BELOW FOR THE NUMBER OF A FACTORY SERVICE CENTER NEAR YOU. YOUR PRODUCT WILL RECEIVE EFFICIENT AND EXPEDIENT CARRY-IN, MAIL-IN, OR IN-HOME SERVICE, AND YOU WILL RECEIVE PEACE OF MIND, KNOWING YOUR PRODUCT IS BEING GIVEN THE EXPERT ATTENTION OF PHILIPS' FACTORY SERVICE.**

COMMENT OBTENIR NOTRE SERVICE APRÈS VENTE RAPIDE ET EFFICACE SOIT PAR COURRIER, À DOMICILE, OU EN SE PRÉSENTANT À UN CENTRE DE SERVICE PHILIPS. PLUS DE 600 CENTRES DE RÉCEPTION DE PRODUITS À RÉPARER À TRAVERS LE PAYS: CONTACTER LE CENTRE DE SERVICE AUX CONSOMMATEURS LE PLUS PROCHE POUR SAVOIR L'EMPLACEMENT DE CES DÉPÔTS DANS UN RAYON DE 50 À 75 MILES (80 KM À 120 KM) DU CENTRE DE SERVICE LOCAL.

CÓMO OBTENER UN SERVICIO OPORTUNO Y EFICIENTE POR CORREO, EN CASA O EN PERSONA PARA SU PRODUCTO A TRAVÉS DE UN CENTRO PHILIPS DE SERVICIO. MAS DE 600 SITIOS POR TODO EL PAIS PARA LA RECEPCION DE PRODUCTOS NECESITADOS DE REPARACIONES: COMUNICARSE CON EL CENTRO DE SERVICIO DE FABRICA MAS CERCANO PARA ESTOS LUGARES DENTRO DE UN RADIO DE 80 A 120 KM (50 A 75 MILLAS) DEL CENTRO DE SERVICIO LOCAL.

## **ATLANTA**

Philips Factory Service  
200 N. Cobb Pkwy., Suite 120  
Marietta, GA 30062  
800-273-1501

## **TAMPA**

Philips Factory Service  
1911 US Highway 301 North  
Tampa, FL 33619  
800-442-2027

## **SAN FRANCISCO**

Philips Factory Service  
681 East Brokaw Rd.  
San Jose, CA 95112  
800-300-9013

## **HOUSTON**

Philips Factory Service  
1110 N. Post Oak Rd., Suite 100  
Houston, TX 77055  
800-952-3254

## **CLEVELAND**

Philips Factory Service  
950 Keynote Circle  
Brooklyn Heights, OH 44131  
800-331-7037

## **DETROIT**

Philips Factory Service  
25173 Dequindre  
Madison Heights, MI 48071  
800-438-1398

## **DALLAS**

Philips Factory Service  
415 N. Main Street, #107  
Euless, TX 76040  
800-952-3254

## **CHICAGO**

Philips Factory Service  
1279 W. Hamilton Pkwy.  
Itasca, IL 60143  
800-531-2922

## **KNOXVILLE**

Philips Factory Service  
6700 D Papermill Rd.  
Knoxville, TN 37919  
800-821-1767

## **PHILADELPHIA**

Philips Factory Service  
352 Dunks Ferry Rd.  
Bensalem, PA 19020  
800-847-9320

# LIMITED WARRANTY

## One Year Free Labor One Year Free Service on Parts

### WHO IS COVERED?

You must have proof of purchase to receive warranty service. A sales receipt or other document showing that you purchased the product is considered proof of purchase.

### WHAT IS COVERED?

Warranty coverage begins the day you buy your product. For one year thereafter, all parts will be repaired or replaced and labor is free. After one year from the day of purchase, you pay for the replacement or repair of all parts, and for all labor charges. All parts, including repaired and replaced parts, are covered only for the original warranty period. When the warranty on the product expires, the warranty on all replaced and repaired parts also expires.

### WHAT IS EXCLUDED?

Your warranty does not cover:

- labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- product repair and/or part replacement because of misuse, accident, unauthorized repair or other cause not within the control of Philips Consumer Electronics Company.
- reception problems caused by signal conditions or cable or antenna systems outside the unit.
- a product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- incidental or consequential damages resulting from the product. (Some states do not allow the exclusion of incidental or consequential damages, so the above exclusion may not apply to you. This includes, but is not limited to, prerecorded material, whether copyrighted or not copyrighted.)
- a product used for commercial or institutional purposes.

### WHERE IS SERVICE AVAILABLE?

Warranty service is available in all countries where the product is officially distributed by Philips Consumer Electronics Company. In countries where Philips Consumer Electronics Company does not distribute the product, the local Philips service organization will attempt to provide service (although there may be a delay if the appropriate spare parts and technical manual(s) are not readily available).

### MAKE SURE YOU KEEP ...

Please keep your sales receipt or other document showing proof of purchase. Attach it to this owner's manual and keep both nearby. Also keep the original box and packing material in case you need to return your product.

### BEFORE REQUESTING SERVICE ...

Please check your owner's manual before requesting service. Adjustments of the controls discussed there may save you a service call.

### TO GET WARRANTY SERVICE....

Repair must be performed by an authorized service center or a factory service center. If you do not live near a factory service center, contact your dealer. If your dealer is an authorized service center, he will arrange repair. If your dealer is not an authorized service center he will direct you to the authorized service center engaged by him to service the products he sells.

(In U.S.A., Puerto Rico and U.S. Virgin Islands, all implied warranties, including implied warranties of merchantability and fitness for a particular purpose, are limited in duration to the duration of this express warranty. But, because some states do not allow limitations on how long an implied warranty may last, this limitation may not apply to you.)

(In Canada, this warranty is given in lieu of all other warranties. No other warranties are expressed or implied, including any implied warranties of merchantability or fitness for a particular purpose. Philips is not liable under any circumstances for any direct, indirect, special, incidental or consequential damages, howsoever incurred, even if notified of the possibility of such damages.)

### IF YOU HAVE QUESTIONS IN CANADA

Please contact Philips at:

1-800-661-6162 (French speaking)

1-800-363-7278 (English speaking)

### REMEMBER...

Please record the model and serial numbers found on the product below. Also, please fill out and mail your warranty registration card promptly. It will be easier for us to notify you if necessary.

MODEL # \_\_\_\_\_

SERIAL # \_\_\_\_\_

*This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.*

Philips Service Company, P.O. Box 2976, Longview, Texas 75606 (903) 242-4800.